

STATE LIBRARY OF PENNSYLVANIA



3 0144 00266816 8

# PENNSYLVANIA GAME NEWS

VOL. LVI

DICK THORNBURGH, GOVERNOR





PY G192.17/4 v.56 c.2

Pennsylvania Game News

PENNSYLVANIA STATE LIBRARY  
DOCUMENTS SECTION

PY G192.17/4 c.3

Pennsylvania game news



Digitized by the Internet Archive  
in 2016





# PENNSYLVANIA GAME NEWS

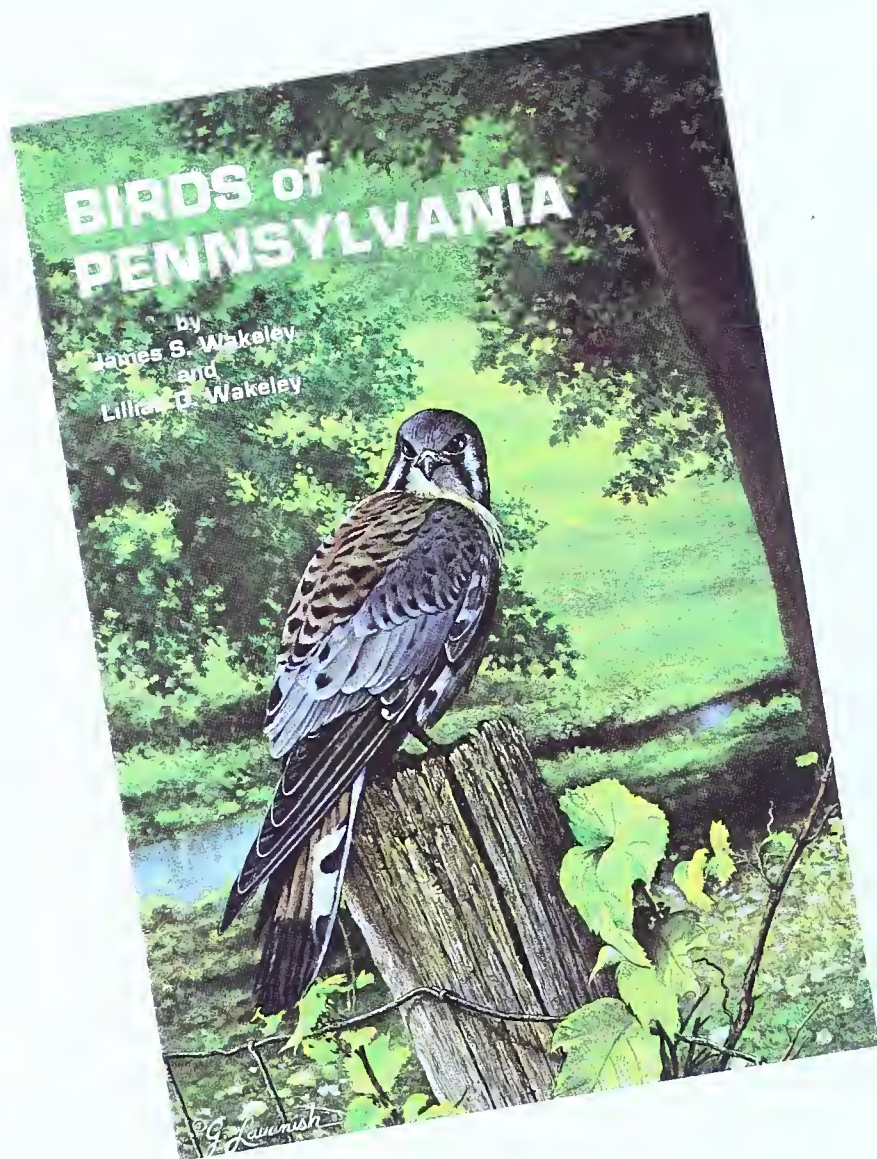
JANUARY 1985

60 CENTS



NED  
SMITH





*Birds of Pennsylvania: Natural History and Conservation*, a completely new book by Jim and Lillian Wakeley, includes the most up-to-date information on bird biology and behavior, and the kinds of birds commonly found in the state, arranged according to the type of habitat where they are most likely to be seen. This 214-page hardcover book, supplemented with 40 full-color pages featuring the Game Commission's popular bird charts and previous GAME NEWS covers, is being sold for \$10, delivered.

Make check or money order  
payable to:

PENNSYLVANIA  
GAME COMMISSION  
P.O. Box 1567  
Harrisburg, PA 17105-1567

# Big Woods Bobcat

**B**IG WOODS BOBCAT by Ned Smith, as shown on our cover, becomes the third limited edition fine art print available from the Pennsylvania Game Commission. This issue, as before, will consist of 600 full color prints, each signed and numbered by the artist. Image size is approximately 15 x 22½ inches, on acid-free 100 percent rag paper. Prints are priced at \$125, including Pennsylvania sales tax, shipping and handling. Framed prints are available for an additional \$97.50. Orders are being accepted now at Game Commission headquarters in Harrisburg on a first-come, first-served basis.

Print buyers who purchased the first two Game Commission limited edition prints, *River Otters* and *Dutch Country Bluebirds*, also by Ned Smith, can request a matching number for *Big Woods Bobcat*. A limited supply of *River Otters* and *Dutch Country Bluebirds* is still available and prints can be purchased for the same prices as *Big Woods Bobcat*.

All profits from the sale of the limited edition prints are earmarked for the Working Together for Wildlife Program. This program was created by the Game Commission to generate financial support, from nonhunters as well as hunters, for the nongame wildlife of Pennsylvania.

Embroidered bobcat patches and decals will also be for sale within a few months, with the proceeds going to the WTFW program. Watch for an announcement. Patches will be \$3 and decals \$1.

Also of interest to many collectors are earlier items created to benefit the WTFW program. Some of these are still available, including the original patch and decal featuring a flying squirrel and the motto "We Need Wildlife." The patch is \$3, the decal, \$1. The osprey was featured in 1982, 1983 saw a river otter on the patch and decal, and last year a bluebird was featured.

No osprey patches are left, but limited supplies of otter and bluebird patches remain at \$3 each. Decals are available for all nongame species featured in the past, at \$1. Also, some river otter T-shirt iron-on transfers are in stock, priced at \$1. Cash donations for the Working Together for Wildlife Program also may be accepted by the Game Commission: they are tax deductible.

Send check or money order for limited edition prints, patches and decals to:

Pennsylvania Game Commission  
Department AR  
P.O. Box 1567  
Harrisburg, PA 17105-1567.



**Richard L. Thornburgh**  
Governor

## COMMISSION MEMBERS

**Donald R. Craul**, President  
Lewisburg & Wellsboro

**Thomas P. Greenlee**, Vice-President  
Tionesta

**Taylor A. Doeblar, Jr.**, Secretary  
Jersey Shore

**Edwin J. Brooks**  
Lansdale

**Elmer M. Rinehart**  
Stroudsburg

**Paul E. Hickes, Jr.**  
Alexandria

**C. Dana Chalfant**  
Gibsonia

**Roy J. Wagner, Jr.**  
York

## EXECUTIVE OFFICE

**Peter S. Duncan**  
Executive Director

**Harvey A. Roberts**  
Deputy Executive Director

**Ross E. Starner**  
Comptroller

## BUREAU DIRECTORS

**Kenneth L. Hess**  
Administration

**Dale E. Sheffer**  
Game Management

**Lantz A. Hoffman**  
Information & Education

**Jacob I. Sitlinger**  
Land Management

**Gerald D. Kirkpatrick**  
Law Enforcement

**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

## GAME NEWS

**Robert S. Bell**  
Editor

**Robert C. Mitchell**  
Assistant Editor

**GAME COMMISSION**  
(717) 787-4250

## FEATURES

Winter Grouse .....	2
By K. D. Pritts	
PGC Annual Report—July 1, 1983– June 30, 1984 .....	6
A Morning After Foxes In January .....	27
By Bob Stortenbecker	
Questionnaire .....	31
Darius—the Great Persian Conservationist .....	43
By Robert M. Alison	
The Little School That Could .....	49
By Fredrick G. Weigelt	

## NEWS

Books in Brief .....	30, 41
Field Notes .....	35
Conservation News .....	40
By Ted Godshall	
In the Wind .....	64
By Bob Mitchell	

## COLUMNS

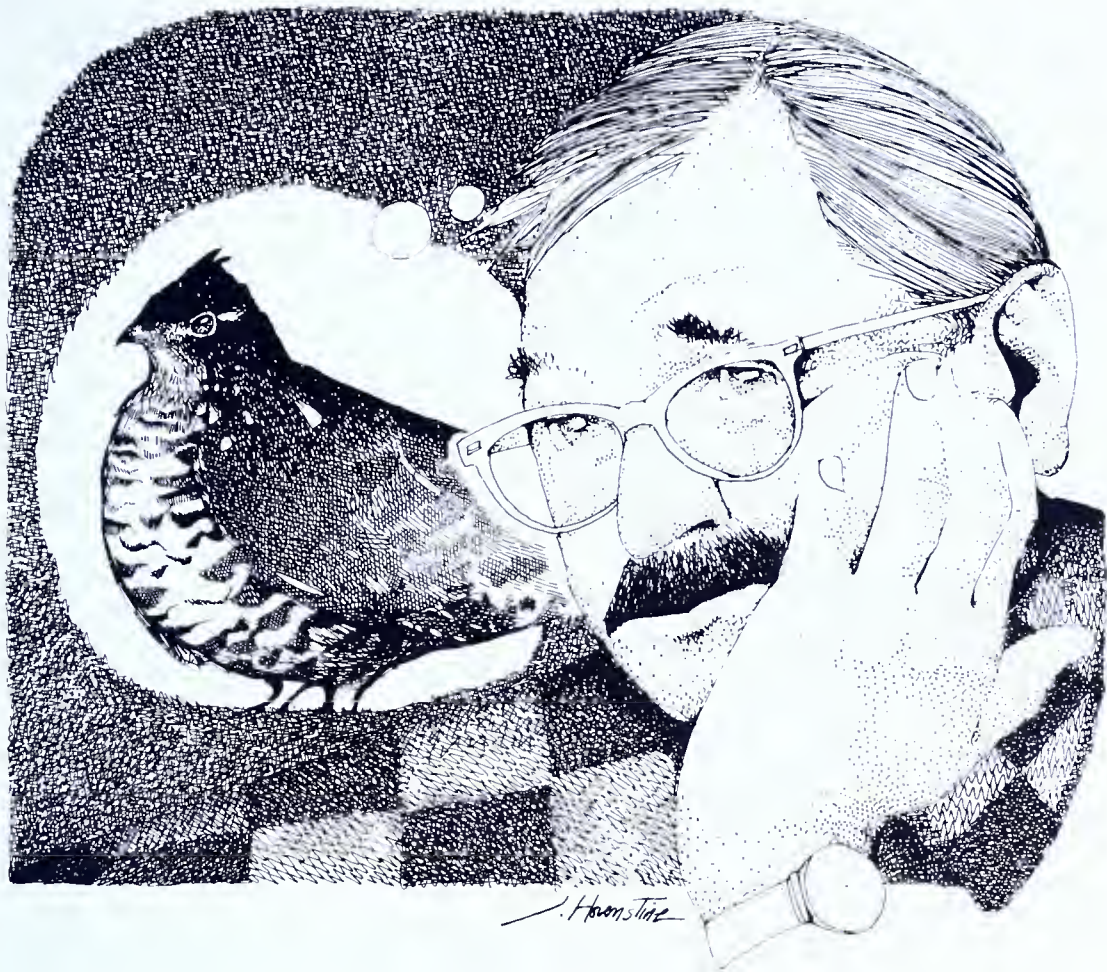
Young Artists Page .....	25
Outdoor Wildlife Learning .....	45
By Bill Einsig	
DGP Diary .....	47
By Joe Carlos	
Thornapples .....	50
By Chuck Fergus	
Bowhunting Ethies (Arehery) .....	54
By Keith C. Sehuyler	
Year of Deeision (Guns) .....	59
By Don Lewis	

## COVER PAINTING BY NED SMITH

PENNSYLVANIA GAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Second-class postage paid at Harrisburg, Pa. CHANGE OF ADDRESS: POSTMASTER: Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1984 by the Pennsylvania Game Commission. All rights reserved.

NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.





AFTER CHRISTMAS, MOST PEOPLE are ready to relax and take it easy, happy to stay home and avoid the cold. Then there are the grouse hunters. . . .

## WINTER GROUSE

By K. D. Pritts

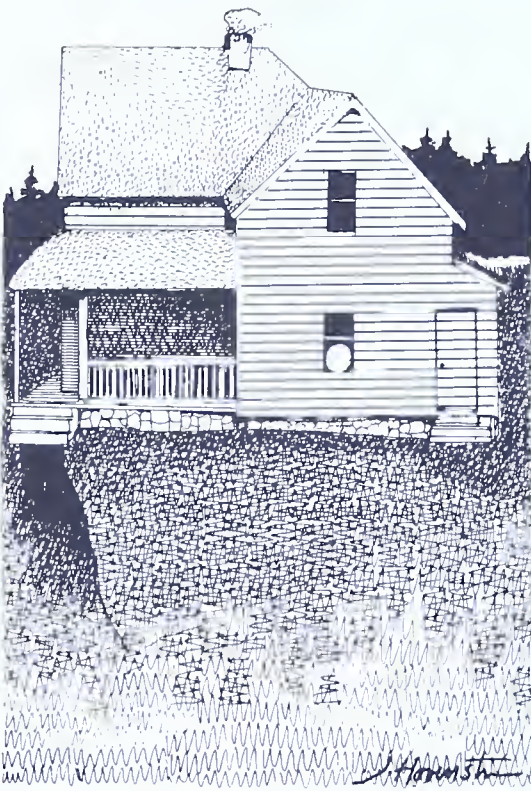
**T**WAS THE DAY after Christmas and all through the house, only one hunter was stirring, and he was dreaming grouse . . .

The first day of the extended grouse season dawned snowy and icy cold. The thermometer's red line hung at 15° below zero, and a quick glance at the window revealed only a heavily frosted pane barring the view.

This was not exactly the type of small game hunting weather I was accustomed to. Being from the rolling farmlands of Lancaster County where the weather is mild and the long-tailed pheasant is king, the steep mountains

of a wintry Fayette County would present a challenging hunt. Only a dedicated grouse hunter or a fool would venture out on a day like this, and although I didn't really consider myself either, my wife didn't hesitate to voice her opinion as to which category I belonged to.

I hunt grouse only one day a year, that day coming amidst our annual holiday visit with relatives. I look forward to this day even more than to deer season, probably because I find deer easier to bag than grouse. My game bag had not carried a grouse for years, but I felt this year would be different. Even



**THE GROUSE'S** departure should have signaled the end of a disastrous morning and a return to the warmth of grandmother's kitchen for hot coffee and pie. But I decided to press on.

the weather on this arctic day couldn't lower my spirits, and I was determined to proceed with the hunt. Bundled under several layers of winter clothing topped by a red-and-black Woolrich coat, I prepared to leave, looking, as my wife said, more like a day-late Santa Claus than a hunter. I was unable to convince any friends or relatives to take a refreshing hike with me so, with no further ado, I was off.

I planned on hunting an area within sight of the house, but my starting point lay a mile across open fields. A dedicated grouse hunter would have made the trek willingly, but not being of the faith, as they say, I decided to drive to within a hundred yards of my intended hunting area. My car had other ideas. After going through several cans of lock deicer, I finally gained entrance to the vehicle. The old car just wasn't ready to wake up in the bitter cold, and after a few moans and groans it

simply went back to sleep to await warmer weather. Sheepishly I borrowed a vehicle that had been properly prepared for winter, and again I was ready to go.

Even with the unexpected delay, my spirits were high as I approached my destination, although five minutes in a cold car made the wind seem somewhat more penetrating than it had been in the driveway. Loading the 12-gauge pump suddenly became a slow motion chore, and of course I had to search through the snow to find the shells I dropped. After a certain amount of maneuvering, my gun was finally loaded and I set off for the forest to begin the hunt.

### Over or Through?

Predictably, at the edge of the woods was a barbed wire fence, which required that I unload the gun. I debated whether to do a high wire act and go over, or crawl through the snow and go under. In the end, I opted to simply ease between the top and middle strands. But many layers of clothing had swelled me to the size of a well-fed Santa, and I found myself caught top and bottom by barbed wire. It would have been an embarrassing predicament in any weather, but with slippery snow covering the ground and one hand trying to keep my shotgun out of the snow, it became, shall I say, interesting. After a few gymnastic twists I was nearly free when an inopportune step buried my gun in a snowbank and left me feeling like a kite stuck in a tree. Luck was with me, however, and with only minor surgery and a few moderate field alterations to a \$70 jacket, I was ready to dive into the snowbank in search of my shotgun. The recent arm flailing had gotten the blood pumping again and excavation was quick. Then another problem became obvious. My shotgun was caked with snow inside and out. I brushed off the outside and blew the snow from the barrel and action. Tried to blow, I should say. Warm breath meeting snow at 15° below zero makes very interesting ice formations. A handkerchief and



stick solved this latest problem after a brief struggle.

I was now through the fence, in the woods, and ready to load up for the hunt. It was now midmorning, and as I looked back toward the car I could still see the house in the background. As I pulled a shell from my pocket, a thunderous burst directly above my head resulted in another search in the snow, this time for the shell. The grouse had apparently enjoyed my morning comedy and exercise show, but decided to leave posthaste when he discovered there was a remote possibility I was dangerous. For most, that would have signaled the end of a disastrous morning and a return to the warmth of grandmother's kitchen with hot coffee and cherry pie. But in my slightly frozen and addled state, I decided to press on.

Now the hunt began in earnest. With shotgun at the ready, I became a deadly hunter stalking the elusive ruffed grouse. I stalked and stalked and stalked. The grouse were there, make no mistake about that, but they were never where I happened to be. It occurred to me that the ring-necked pheasant is a much more pleasant bird to hunt. Pheasants hang out in fencerows and cornstubble, making hunting relatively easy and shooting open and calculated. Grouse, on the other hand, usually burst from a thicket when one is hopelessly tangled in grapevines, and rarely stay in view more than a few seconds. They also have the nerve-racking habit of thundering out of a tree directly overhead while one is intent on approaching a tangle of grapevines where grouse are supposed to sit.



LATE winter's lure.

I soon discovered that cold affects various parts of the body differently. While climbing ridges my torso was warm, but my face was always numb, and I inadvertently trimmed my mustache when I broke the ice formation forming on my upper lip. Yet there was a strange warmth throughout me as I rediscovered the hills and valleys hunted in days long since passed. The game was still there, as the tracks in the snow clearly showed. Deer, fox, rabbits, squirrels, and more grouse than I ever remembered. By noon I was satisfied and the hunt was over.

As I returned to the car a rabbit burst from under a tangle, struggling to gather speed in the powdery snow. With a figurative tip of the hat, I let him pass. There is more to the hunt than bringing home game, and as I exited the woods with an empty game bag I was already planning next year's hunt for the trophy of Penn's Woods, the ruffed grouse.

## Don't Make 'Em Mad

A single drop of Australian tiger snake venom contains enough poison to kill 25 people. Fortunately, this medium-size snake normally uses its toxin only to kill small frogs.

## No Escape Anywhere

Acid rain has claimed a new victim: the Arctic. Environmentalists warn that increasing levels of pollutants could harm the Arctic's fragile ecosystem and hide the famed northern lights behind a haze.

# Pennsylvania Game Commission

## Annual Report

### July 1, 1983–June 30, 1984

#### EXECUTIVE OFFICE

**Peter S. Duncan,**  
**Executive Director**

As fiscal 1983–84 came to a close this past June, it marked 11 years since the Pennsylvania Game Commission last received legislative approval to raise resident hunting license fees. Our license revenue base has remained basically unchanged for well over a decade. In the meantime, operating overhead skyrocketed, and in some categories, costs have increased more than 500 per cent. While other state agencies enjoyed significant license increases, our operations were sustained through wise fiscal management and substantial reserves—reserves built up over the years from oil, gas and coal leases; timber sales; federal augmentations from Pittman-Robertson funds; and interest bearing accounts.

Over the past two fiscal years, however, we've depleted our unreserved fund balance by \$7,500,000. By 1986 our reserves will be nearly exhausted and unless increases are approved for the 1985–86 license year, there will be insufficient monies available to sustain Commission operations. Without a substantial increase, the Commission will be forced to curtail programs and services; proposed new programs aimed at enhancing wildlife populations and outdoor recreational opportunities will be postponed or abandoned; and it's inevitable, some employees will be furloughed.

For 90 years, almost a century, the Pennsylvania Game Commission has been fulfilling its primary obligation to provide lands for public hunting, and wildlife populations yielding substantial annual harvests. The Pennsylvania Game Commission is primarily a service agency providing Commonwealth citizens with two intangible products, the opportunity to hunt, and the opportunity to enjoy wildlife on a nonconsumptive basis.

Sportsmen must understand that, although a part of state government, the Commission itself is self-supporting. It does not, and cannot, draw money from general appropriations. It cannot borrow money or obtain loans. It cannot arrange for, or receive, deficit appropriations. We must work on a cash basis, and therein lies the problem.

To reiterate, by summer of 1986—when, without a license increase, the unreserved fund balance will go below \$6,000,000—there will be insufficient funds to meet our obligations, commitments and payrolls from July through October. October is when we first realize revenues from a new license year. No significant license revenues are received between April and September.

Quite frankly, the Game Commission is nearing a financial crisis in which the very survival of the agency's programs and services is at stake. Hunting is not only important to the economy of the state, but is of utmost importance to sportsmen and outdoor enthusiasts concerned with the future of Pennsylvania's wildlife management program.

This month, as a new session of the General Assembly convenes, the Commission, in its role as a policy making body, has directed the execu-

**Executive Director PETE DUNCAN, left, and Deputy Executive Director HARVEY ROBERTS are responsible for coordinating the agency's many activities in accordance with guidelines established by the Commission.**





tive office to seek legislation authorizing approximately \$14.8 million in new license revenues—the amount necessary to carry the agency through 1990 based on an annual inflation rate of 8 percent. Any lesser amount will require that we again seek additional license increases prior to 1990. That would interfere with long range planning and we would lack a sense of direction if forced to return to the legislature every two or three years.

As we reflect on wildlife management, we could say most people probably equate hunting strictly with game harvests, but the fact is, hunting is *vital* to Pennsylvania's economy, contributing about a half a billion dollars annually.

Various research publications, including *The National Survey of Fishing, Hunting and Wildlife-Associated Recreation*, published by the U.S. Fish and Wildlife Service, indicate Pennsylvania and nonresident hunters, each year, spend \$110,113,000 on food, travel, lodging and hunting license fees alone. That doesn't take into consideration monies invested in guns, ammunition, automobile fuel, hunting clothing, camp real estate taxes, dogs and other incidental expenses. Economists tell us that each dollar spent on participatory sports also generates another three to four dollars for business not directly associated with the activity. If this is true, then realistically hunting funnels more than a billion dollars annually to Pennsylvania's business community. Anyone who doubts the impact of hunting on the state's economy should tour northern counties during the open fall seasons.

Pennsylvania is considered by many to be the foremost hunting state in the nation. Currently, the Commission licenses nearly 1,200,000 resident, and close to another 100,000 nonresident hunters who pursue deer, bear, wild turkey, cottontail rabbits, ringneck pheasant, squirrels, grouse, migratory birds and waterfowl.

Today, the Game Commission owns and manages for multiple use more than 1,250,000 acres of State Game Lands. Land acquisition and development is an important activity of the agency. In addition to hunting, Pennsylvanians enjoy game lands for hiking, fishing, cycling, horseback riding, snowmobiling, nature study and wildlife observation. The Commission now allocates \$15,000,000 annually to the maintenance of these lands for wildlife and people, an investment that represents 45 per cent of the agency's annual budget.

To the casual observer, it may appear the Game Commission's programs are geared mainly for hunters, and to their credit, hunters over the years have financed the majority of the agency's efforts in wildlife conservation.

But more accurately, the Game Commission is responsible for scientific management of *all* Pennsylvania wild birds and mammals. In all deliberations, the welfare of the wildlife resources receives the first and ultimate considerations. In order of importance, it's wildlife first, consumptive and nonconsumptive users second.

## COMPTROLLER'S OFFICE

By Ross E. Starnier,  
Comptroller

This office is responsible to the Deputy Secretary of Comptroller Operations, Office of the Budget and Administration, and adheres to the directives and procedures established by them. This office continues to maintain through its normal day-to-day operations the overall responsibilities and functions of receipt and disbursement of funds, and offers financial guidance to the Commission for management, information, and budgetary purposes.

The accounting records of the Game Commission are subject to annual audit by the Auditor General. Our internal audit staff was responsible for establishing local depositories for law enforcement monies collected by the six field divisional offices from citations and field acknowledgements. This improved revenue control resulted in some additional interest earnings. Advancement accounts for purchases of \$1,500 or less are audited periodically by our internal audit staff.

This office continues in the effort for ultimate conversion of the commonwealth's present Centralized Accounting System (CAS) to the new Integrated Central System (ICS), which is targeted for July 1, 1985.

In addition, efforts for conversion of accounting records from the current state basis to the Generally Acceptable Accounting Principles (GAAP) basis are ongoing. This project requires year-end adjustments to fund equity by considering all receivables and payables, eliminating any double accounting between funds, and considering unused monies after initial commitment.



**ROSS STARNIER**, comptroller, manages the finances of the Game Commission and eleven other state agencies.



## **BUREAU OF ADMINISTRATIVE SERVICES**

**Kenneth L. Hess, Director**

This bureau encompasses the Personnel, Hunting License, Procurement, Office Services, Labor Relations and Training divisions, plus the Ross Leffler School of Conservation.

### **Field Administration**

Primary administrative policy lies with Harrisburg; however, administration is delegated to the six regional offices to insure a uniform implementation of Commonwealth and Commission policies and directives.

### **Ross Leffler School of Conservation**

This training facility has been used since 1936 by the Game Commission in its policy of training new employees in all phases of conservation and game management prior to assignment to vacant field positions. To date, eighteen classes have been graduated for a total of 402 conservation officer graduates. The intensive game conservation officer training program is composed of classroom instruction augmented by on-the-job training with selected field officers in land management, law enforcement and related areas. Many in-service training workshops are conducted at the school for all levels of Pennsylvania Game Commission employees and other conservation-related associations.

### **Office Services**

This division is responsible for the ordering, stocking and distribution of all clerical supplies, paper materials and Commonwealth forms used by the Harrisburg office, six region offices, five game farms, Howard Nursery and the Ross Leffler School of Conservation. All Harrisburg office duplicating requests are processed through this office as well as the compiling of statistics for the annual updating of the Data Book. All incoming mail is sorted and distributed by this

**KEN HESS** coordinates all of the agency's administrative functions, including the hiring and training of personnel, and the issuance of hunting licenses.

section. The processing of all outgoing mail to Region Offices, Game Commission field personnel, news media, sportsmen's clubs and the general public, as well as the maintaining of the mailing lists, is handled here. The messenger service and warehouse storage is maintained by this office.

### **Personnel Office**

The Personnel Office centrally develops, coordinates and directs all statewide personnel management programs and activities in the following major areas: workforce analysis and planning; recruitment, selection and placement; classification and pay; performance evaluation; benefits and services; personnel transactions; leave administration and records; and employee career development. This office provides appropriate training in these areas for all units located centrally and throughout field operations. All of this must be developed and coordinated in total accord with agency policy, civil service law, commonwealth personnel rules and collective bargaining agreements.

Current operations involve approximately 700 permanent and 75 seasonal employees in 125 different position classifications. Of this number, approximately 125 are located in the Harrisburg headquarters and the remainder are situated at various field locations and operations in all 67 counties.

A formal comprehensive Affirmative Action Program exists to insure equal opportunity for all employees and applicants by developing, implementing, reviewing and coordinating equal employment opportunity regulations.

The Personnel Office is continually reviewing our complement to determine manpower needs, and our continuing policy is to fill only those positions that are absolutely necessary to the operations of the agency.

### **Labor Relations**

Labor relations responsibilities are comprehensive, involving a master contract, a master memorandum, and approximately 11 different employee unit agreements, negotiations, labor/management meetings, management training, handling of grievances and arbitration.

In-service and out-service training are provided for permanent employees through college and university courses related to job responsibilities, along with internal workshops and seminars. In the past year, approximately sixteen employees participated in eleven different out-service training courses, and 97 employees participated in ten different courses presented by the Office of Administration. Our in-service central office training/orientation program was presented to six field employees and two central office employees.



The in-service first aid training program has provided 260 employees with cardio-pulmonary resuscitation (CPR) training, and 192 employees with multi-media first aid training.

**Hunting License Section**

This division appoints and supervises approximately 1200 issuing agents comprising county treasurers and private businesses. Monthly reports are received and audited, with revenue deposited into the Game Fund by way of the state treasurer. The Hunting License Section makes sure agents remit funds due on a monthly basis and that licenses allotted to them do not exceed the amount of bond security. Antlerless deer licenses are issued only by county treasurers.

Our Harrisburg License Unit issues licenses by mail and over the counter. Many nonresidents take advantage of this service, as do an increasing number of residents.

Selected agencies at key locations in Ohio, New Jersey and Maryland have been appointed and continue as a service and convenience to our nonresident hunters.

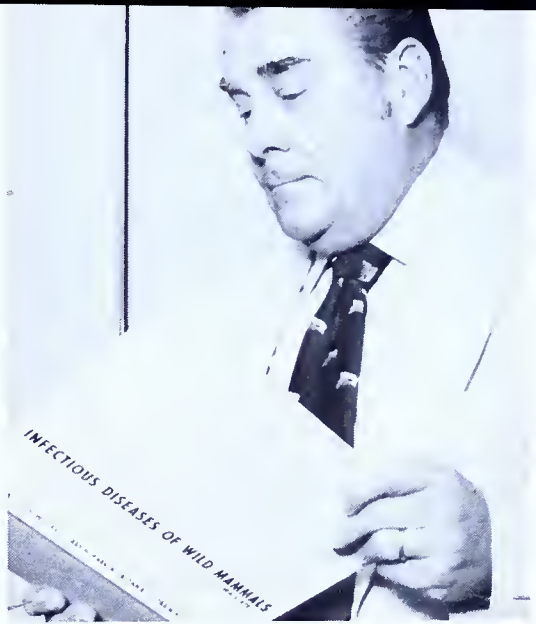
Most categories of licenses sold for the 1983-84 hunting license year indicate minimum changes in sales over the previous year. Approximately 1,759,747 of all types of licenses (except antlerless deer) were sold during the past license year (9-1-83 to 8-31-84), returning \$16,412,664 to the Game Fund.

	<b>1983-84 *</b>
Adult Resident	981,230
Junior Resident	144,592
Senior Resident	70,064
Nonresident	72,638
Archery	275,786
Muzzleloader	113,695
Antlerless Deer	519,422
Three-Day (Regulated Shooting Grounds)	1,742
Resident Bear	98,708
Nonresident Bear	1,292

\*Sales through August 31, 1984

**Procurement Division**

The Procurement Division is responsible for buying all commodities and equipment exceeding \$5000, plus all gasoline and fuel oils for six regions, the five game farms, research projects, Ross Leffler School of Conservation, Howard Nursery, the wildlife management areas, and all other installations. All advance account purchases for the Bureau of Administrative Services are processed through this office. Also, all printing and office supplies are ordered by the division from the Department of General Services Warehouse. Records are kept of all purchases. This division also writes specifications and justifications, reviews bid proposals, furnishes commonwealth contracts to Commission personnel, and is the liason with the Department of General Services.



**DALE SHEFFER is responsible for directing the Commission's wildlife research activities.**

**BUREAU OF  
GAME MANAGEMENT  
Dale E. Sheffer, Director**

There is a Division of Research and a Division of Propagation within the Bureau of Game Management. The Division of Propagation raises and distributes ring-necked pheasants. The Research Division conducts studies, surveys, and inventories of wildlife.

Five game farms are operated to rear ring-necked pheasants. A field coordinator supervises the activities on all the farms through the game farm superintendents. He coordinates the propagation and arranges distribution to release the number produced. He also handles administrative matters such as bulk purchases for the farms and handles the budget from the headquarters office.

In 1983, 450,000 ring-necked pheasants were raised and released, and 1,741 cottontail rabbits were trapped and released.

Also produced on the game farms were 10,121 day-old pheasant chicks which were given to sportsmen cooperators for raising and release. Another 25,450 day-old surplus hen pheasant chicks and 33,340 surplus eggs were sold by bid.

The Division of Research consists of a coordinator, twelve wildlife biologists, and six wildlife technicians. These personnel conduct studies, surveys and inventories of wildlife. Following evaluation, management recommendations are made.

The research coordinator reviews job schedules, plans work and recommends new or additional research and techniques. He also coordinates the writing and submission of annual reports on work accomplished, and assists with the administrative duties in the headquarters office.

Research studies are being conducted on the following:

- White-tailed Deer
- Black Bear
- Ruffed Grouse
- Fox Squirrel
- Wild Turkey
- Cottontail Rabbit
- Ring-necked Pheasant
- Snowshoe Hare
- Waterfowl
- Osprey
- Small Game Harvests
- Bald Eagle
- Nongame
- Furbearing Mammals
- Bobcat
- Indiana Bat
- River Otter
- Hungarian Partridge

The Harrisburg headquarter's research staff handles several thousand written and more than 1,000 telephone inquiries concerning wildlife research and management. In excess of 60,000 forms are distributed. The information is compiled and evaluated upon return. Following review and editing, annual research reports are disseminated and made available upon request. Harvest management recommendations are submitted annually to the Commission for consideration.

## BUREAU OF INFORMATION AND EDUCATION

**Lantz A. Hoffman, Director**

### Public Information Division

Pennsylvania's deer management program continues to be viewed by wildlife professionals as among the best in the nation. Pennsylvania, although a heavily populated industrial state with over a million hunters, sustains one of the largest and healthiest deer herds on the North American continent.



First initiated in 1957 and updated and improved in 1979, the deer management program has been highlighted for nearly a quarter century with annual reported harvests exceeding 100,000 animals. Based on known reporting rates, actual annual harvests have exceeded 200,000.

Yet, during the winter and spring of fiscal 1983-84, this highly successful program continued to come under attack from some hunters who find our management concepts difficult, if not impossible, to comprehend. Their frustration, wrought of misunderstanding, is often vented in emotional rhetoric aimed at eliminating doe season because in their opinion "there just aren't enough deer," especially in those areas which at one time supported larger populations. It's unfortunate, but the dissidents, however well intended, only serve to further factionalize sportsmen's ranks, promote distrust, and in the end, supply additional grist for the mills of anti-hunters.

Fact is, Pennsylvania today has at least as many deer as at any time in the recent past. The deer, however, are more widely dispersed now, and it's true, fewer deer occupy maturing hardwood forests in northern tier counties—counties where most of the hunting camps are permanently located, camps that have been in the same families for generations.

These same forests that supported 40 deer per square mile 20 and 30 years ago have gone from seedling stage to maturing trees. Only once in a hunter's lifetime will he have the benefit of a hardwood forest at its maximum productivity of "browse"—the seedling-sapling stage that can support large numbers of deer. It takes 75 to 100 years for a hardwood forest to reach maturity, when it can be cut and a new forest regenerated.

While forest compositions change—increasing and decreasing their food value for deer—the Game Commission biologists, foresters and field officers work hand in hand to manage the deer herd, keeping it compatible with the forest's overwintering carrying capacity. Herd control is the key to deer management. Each December, we must reduce the deer population in each county management unit to a level the forests can safely overwinter.

Early in 1984, cognizant of an urgent need for sportsmen to understand and embrace our deer management program, the Bureau of Information and Education began developing a simplified short course that could be presented at sportsmen's clubs and public meetings, an hour-long format most hunters could easily understand. Although no easy task, the course was developed and 136 game protectors were trained to make the program and information available to sportsmen.

**The Bureau of I&E, under the direction of LANTZ HOFFMAN, serves as a liaison between the agency and the state's citizens it serves.**



The Bureau was convinced most sportsmen, once exposed to the basics of deer management, could recognize that wildlife cannot be stockpiled; if you close doe season, or cut down on antlerless license allocations and carry too many deer into winter, nature will bring the population into line with habitat. We have the choice of harvesting deer and utilizing the meat or allowing the surplus deer to die a lingering death and be wasted. Closing antlerless season for one, two or three years would be one of the worst possible mistakes the Commission could make, not only for the animals themselves, but also for the habitat that supports them.

To better inform sportsmen about deer management, the I&E Bureau also developed a simplified 16-step work sheet enabling anyone with basic math skills to calculate antlerless allocations in any or all of the state's 66 management units (See November 1984 GAME NEWS).

The goal of DMEE—the Deer Management Educational Effort—is to ensure that sportsmen understand the deer management program, how antlerless allocations are calculated and why it is essential antlerless deer are harvested on an annual basis.

While Game Commission personnel took the initiative to set up programs in each of the field regions last fall, some groups were missed. The Deer Management Educational Effort is an ongoing program, and if your club would like to participate in one of the 1985 seminars, or if you want a deer management program presented before your group, contact a district game protector, or the Information and Education Supervisor at one of the Commission's six regional offices.

## Conservation Education Division

### Project WILD

The Pennsylvania Game Commission through its Bureau of Information and Education is committed to providing factual information regarding wildlife and wildlife management to all people of the Commonwealth. This commitment is evidenced by the many services and materials made available to the public, most of which are free.

Educational booklets, pamphlets and leaflets are distributed by the hundreds of thousands annually with the Commission absorbing nearly all printing and mailing costs. Services are provided to all educational institutions and individuals requesting assistance, and the Game Commission continually strives to improve the quality of our programs. One new educational program provided by the Game Commission is Project WILD.

**ROSE ISENBERG** is one of those responsible for fulfilling orders for maps and other free and paid publications produced by the Game Commission.

Project WILD is probably the finest example of wildlife education curriculum materials ever developed, and the Pennsylvania Game Commission, like many other state agencies, recognized the tremendous potential in Project WILD to provide factual wildlife information to people of all ages—but especially to young people.

Project WILD is an interdisciplinary, supplementary environmental and conservation education program emphasizing wildlife. Project WILD's primary audience is teachers of kindergarten through high school students. However, Project WILD can be very helpful to anyone involved with educating others about wildlife and the importance of habitat.

The goal of Project WILD is to assist learners of any age in developing awareness, knowledge, skills and commitment to result in informed decisions, responsible behavior and constructive actions concerning wildlife and the environment upon which all life depends.

Project WILD teaches young people *how* to think, not *what* to think, and has the support of many nationally recognized conservation organizations, including the American Humane Association, National Wildlife Federation, Canadian Wildlife Federation, Defenders of Wildlife, and The Wildlife Society.

The Game Commission became an associate state sponsor of Project WILD in 1983, and to date has provided over \$40,000 to implement the program in Pennsylvania. The agency's annual financial commitment to Project WILD is expected to cost \$20,000 to \$30,000.

The Game Commission, like resource agencies in several other states, is utilizing volunteer facilitators to conduct Project WILD workshops for the benefit of other educators. During early 1984, 200 educators from across Pennsylvania were trained to be Project WILD facilitators. Project WILD has been enthusiastically received in Pennsylvania. Already nearly 1,000 educators have attended Project WILD workshops and have learned to incorporate Project WILD concepts into teaching situations involving tens of thousands of students. Through this



multiplier effect, Project WILD will eventually reach millions of Pennsylvanian's. A knowledgeable and better informed public will ultimately be more supportive of wildlife management programs initiated by the Pennsylvania Game Commission.

## **Exhibits**

The Commission's 1984 major exhibit encouraged the public to "Get Involved" with the Commission's SPORT, Working Together for Wildlife, and Planting for Wildlife programs. The exhibit was viewed by over one million people at the State Farm Show, Eastern Sports and Outdoor Show, and Bloomsburg Fair. Scaled down versions of the exhibit were used to promote these programs at many fairs and shows in the six field regions.

Additional lightweight portable display units were constructed for use by Commission personnel for promoting numerous Commission programs.

## **Planting For Wildlife**

Nearly 250,000 seedlings were distributed statewide through the Commission's Planting for Wildlife program. Public response for the \$2 packet of food and cover producing seedlings has been enthusiastic, with over 15,000 packets sold in 1984. The program will again be offered in April and May 1985 for the benefit of individuals who want to establish wildlife habitat on their properties.

## **Pennsylvania Eagle Protection And Reward Fund**

In its first year of operation, information received through the Pennsylvania Eagle Protection and Reward Fund resulted in the successful prosecution of seven persons involved in killing or wounding bald eagles in the Commonwealth. The Pennsylvania Eagle Protection and Reward Fund provides up to \$1500 to any person offering substantive information leading to the arrest and conviction of individuals who harass, injure or kill a bald or golden eagle. The program is funded by the National Audubon Society, National and Pennsylvania Wildlife Federations, Pennsylvania Federation of Sportsmen's Clubs, the Hawk Mountain Sanctuary Association, and the Pennsylvania Forestry Association.

## **Waterfowl Management Stamps**

Pennsylvania's waterfowl management stamp and print series was created during fiscal 1983-84. To date, over \$270,000 has been received from the sale of waterfowl management stamps and royalties. Some of these monies were used to purchase 523 acres of prime wetlands near Corryville in McKean County, and additional wetlands are under consideration for purchase in other areas of the state.

## **Pymatuning Waterfowl Museum And Visitors Center**

Waterfowl management stamp/print revenues

have also been used to expand the agency's educational efforts at the Pymatuning Waterfowl Museum in Crawford County. The waterfowl museum is now open year-round, hosting more than 100,000 visitors annually. The waterfowl management stamp/print program needs support from all waterfowl hunters so additional wetlands critically needed by waterfowl and other wildlife can be conserved and maintained.

## **Middle Creek Lecture Series**

The Middle Creek Wildlife Lecture Series involved twenty-five programs between April and October of 1984. Nearly 4,000 people attended these programs which were offered free of charge to the public.

## **Pennsylvania Environmental Education Master Plan**

Commission personnel served throughout 1984 on the task force established by Department of Environmental Resources secretary Nicholas DeBenedictis and Department of Education secretary Robert Wilburn to develop a master plan for environmental education in Pennsylvania. The master plan is directed to all Pennsylvania citizens and includes seventeen major recommendations—including the establishment of a State Office of Environmental Education—for improving environmental education in the Commonwealth.

## **Working Together for Wildlife**

Over \$63,000 has already been received from the sale of the 1984 Working Together for Wildlife fine art prints, patches and decals. These monies will be used to help finance numerous nongame wildlife management programs. Monies from this program are also being used to support Project WILD in Pennsylvania. A complete sellout of the fine art limited edition prints, embroidered patches and decals is expected as the program continues to gain support.

## **Cavity Nesters Workshop**

In connection with Working Together for Wildlife and its 1984 feature, the eastern bluebird, the Game Commission, and state Audubon chapters sponsored a workshop for people working with bluebirds and other cavity-nesting wildlife. Over 120 people attended the two-day workshop where they learned of and discussed the latest management techniques for this group of wildlife. Adopted at this workshop was a standardized reporting procedure through which many of the workshop attendees and other cooperators annually will report the results of their next box trails. This new program will enable the Game Commission to monitor the status of bluebirds and other cavity nesters in future years.

## **Hunter and Trapper Education Division**

During this reporting period, 55,754 first-time hunters attended 849 mandatory six-hour hunter education classes. There is a complement of



3,038 volunteer hunter education instructors throughout the state at this time. Thirty-five instructor refresher training classes were held throughout the state, with 1,500 instructors attending. Hunter education continues to show positive results. During the period there were 178 hunting accidents, the lowest number recorded since 1924 when there were less than 504,000 hunters.

Continued emphasis on ethics has been disseminated to hunter education students and others through the SPORT program. It is imperative we continue to improve hunter image, along with safety. Numerous brochures, decals, brassards, placemats, posters, charts and other materials were distributed, publicizing sportsmanship, safety and ethics. Quarterly hunter education newsletters were sent to all instructors, and hunter education coordinators in all states and Canadian provinces. Hunter education exhibits were provided for many groups, including schools, sportsmen's clubs, and scouting organizations. Eighty-nine prints of a new film, "Firearm Safety And The Hunter," were added to the hunter education library.

Since its inception as one of the Game Commission's educational programs 25 years ago, over one million students have graduated from a Pennsylvania hunter education course.

Hunter education programs and class announcements were carried by many newspapers, radio stations and TV stations. GAME NEWS published several hunter education articles.

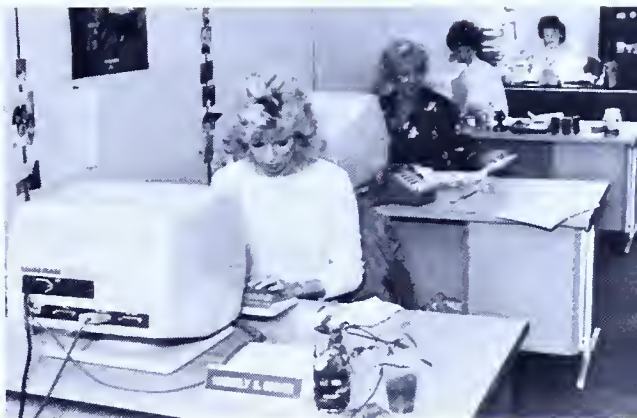
The coveted SPORT Ethics Award was presented to 22 individuals or groups in recognition of their contributions to law enforcement, wildlife management, and hunter-landowner relations.

During the period, 35 trapper education classes were held throughout the state, with 693 students completing these voluntary training sessions. At these classes emphasis is placed upon improving trapper ethics and humane methods of trapping. All 313 volunteer instructors are experienced trappers, a majority of them members of the Pennsylvania Trapper's Association.

## **GAME NEWS and Paid Publications Division**

GAME NEWS continues to be the primary voice of the Pennsylvania Game Commission, and the most successful wildlife agency publication in the world. GAME NEWS circulation over the past year has averaged about 185,000 per month. The great majority of these magazines goes to Pennsylvania residents, but nearly 26,000 are mailed to monthly subscribers in all other states and several dozen foreign countries. No other state conservation magazine exceeds GAME NEWS' paid circulation.

A new feature instituted during this fiscal year is the Young Artists Page. One page in each month's issue is devoted to featuring the talents of two young artists, a junior high student and



**KIM COOVER, BETTY ASHENFELDER, MILDRED FRONK, and LIBBY WILLIAMS** are responsible for maintaining GAME NEWS subscriber lists.

a senior high student. Those whose artwork is published receive a complimentary one-year subscription to the magazine and a cash award—\$35 for senior high students, \$25 for junior high students. The response to this item has been overwhelming as over 1500 entries were received in less than a year's time. Also, one young artist's talents were so outstanding that rather than even consider the artwork for use on the Young Artists Page, the youngster was contracted to illustrate a GAME NEWS story instead.

This division also has been responsible for producing the Wildlife Note series, which was recently completed with a total of 38 Notes covering the wildlife natural history aspects of the most popular of the state's birds and mammals.

*"Birds of Pennsylvania: Natural History and Conservation,"* by James and Lillian Wakeley, was also produced by the GAME NEWS staff. This outstanding book on the state's avifauna has been so well received that the initial printing of 10,000 copies has almost sold out.

## **BUREAU OF LAND MANAGEMENT**

**Jacob I. Sitlinger, Director**

The Bureau of Land Management is responsible for the acquisition and the development of 273 tracts of State Game Lands within the Commonwealth. While used primarily for public hunting, compatible recreational opportunities such as hiking, outdoor photography and birdwatching are also available on these State Game Lands.

Due to ever greater demands being made on the land base by our expanding human population, adverse impacts to wildlife habitat must be addressed by all agencies. The Bureau of Land



**JAKE SITLINGER** directs the many and varied programs within the Bureau of Land Management.

Management has undertaken additional programs within the past few years in an effort to minimize the detrimental effects of modern society on wildlife habitat. Wildlife habitat improvement work is carried out with a variety of management techniques involving field officers, work crews, foresters and administrative personnel at the six regional offices and Harrisburg. The Bureau of Land Management is responsible for 1,268,722 acres of State Game Lands as well as leasing additional lands. A total of 26,000 acres of federal, state, municipal and private lands is also managed for wildlife by the Game Commission. There are 2,335,390 acres of land in the Farm Game Program; 635,221 acres in the Forest Game Program; and 1,669,803 acres in the Safety Zone Program. All of these lands are being managed in different degrees for the enhancement of wildlife.

### **Mineral Management Division**

The environmentally sound recovery of strategic mineral resources from State Game Lands is viewed by the Game Commission as an opportunity to add to existing Game Land acreage through mineral lease-land exchange arrangements with private industry, and to generate important operating revenues in an era of escalating costs and shrinking budgets. Many projects are reviewed; only those that can be implemented without environmental damage are accepted. A prime feature of each approved project is the potential for development of habitat diversity through the preplanned revegetation of project sites to increase the wildlife carrying capacity (i.e., food and cover conditions) of the Game Lands themselves.

During fiscal year 1983-1984, the Commission approved mineral recovery projects which will add 1,076 acres to the Game Lands system through the mineral lease-land exchanges; active oil, gas and coal leases on Game Lands produced operating revenues of \$1,184,074.

### **Environmental Impact Assessment Division**

In a recently completed agency-wide reorganization, the Commission made many important changes in an attempt to reflect its role in protecting the wildlife resources of the Commonwealth as well as assisting other Commonwealth agencies in meeting the wider environmental protection needs of Commonwealth citizens. One change made within what is now the Bureau of Land Management was to formally reorganize the Commission's activities in the areas of habitat protection and environmental impact assessment.

By utilizing a network of cooperative agreements with other commonwealth agencies such as the Department of Environmental Resources, as well as employing its regulatory authority under relevant state and federal legislation, the Commission reviews and comments on proposed projects whose construction will have a decided impact on the wildlife habitat resources within the state. These include highway relocation, flood control impoundments, and proposed stream and wetland encroachments, with major emphasis on assisting the Department of Environmental Resources in its review of applications for the surface mine removal of coal. Avoiding unnecessary losses of valuable habitat through early coordination and better project planning continues to be the primary goal of the Commission's environmental impact assessment program. Each project is studied to identify the wildlife impacts which will result either as a consequence of converting open lands to other permanent uses, or as a result of the temporary disruption of the vegetative cover. Recommendations are made to avoid habitat losses, or to replace habitat values which will be unavoidably lost as a result of the project construction or the granting of the required federal or state permit.

For the past several years, the Game Commission has led an interagency team consisting of the U.S. Fish and Wildlife Service and the Fish Commission in developing a habitat evaluation procedure to serve as an accurate, comprehensive and reproducible method of describing project related habitat losses and, more importantly, for developing techniques which can be incorporated into the overall project requirement to mitigate those project related losses which are unavoidable. This procedure, which is based on the U.S. Fish and Wildlife Service's Habitat Evaluation Procedure (HEP) is presently being called PAM-HEP (Pennsylvania Modified-HEP) and is in the final stages of refinement. The development of this procedure is an important step in establishing the credibility of the Game Commission and associated wildlife protection agencies in being able to objectively measure and describe construction related wildlife losses.

During the fiscal year 1983-1984, the Environmental Impact Review Section reviewed and commented on approximately 40 highway relocation and construction projects, 431 appli-



**RALPH DENGLER** conducts title searches and coordinates surveys of properties considered for purchase as Game Lands.



cations for stream and wetland encroachment permits and solid waste disposal sites, 372 applications for the surface mine removal of coal (encompassing some 33,154 acres of potential habitat impacts), and assisted in the review of four petitions filed with the Department of Environmental Resources to declare important watershed areas off limits to surface mining.

### **The Pennsylvania Fish And Wildlife Data Base**

During the past fiscal period, information from the Pennsylvania Fish and Wildlife Data Base has been integrated in habitat evaluations and wildlife impact assessments conducted by the Environmental Impact Assessment and Minerals Division. The Data Base also has been utilized to expedite wildlife management planning on public lands in the commonwealth.

The Data Base program was supported through a paid subscription arrangement by two state agencies and six federal agencies during the fiscal year. These agencies accessed the Data Base 227 times during the year to obtain fish and wildlife species data. In addition, 27 data requests from environmental consultants and other non-subscribing users were received and processed.

Two major improvements were completed this past fiscal year in Data Base operations. An updated, state-of-the-art version of database management software was tested and made available to all users in the spring of 1984. Also, the data compilation format was reviewed and revised to better serve the needs of the agency and outside users. Data collection was also initiated during the fiscal year for endangered and threatened birds and mammals.

### **Forestry Division**

There were 10,402 acres of State Game Lands designated to receive wildlife habitat improvement treatment by commercial timber sale activity during the period July 1, 1983 through June 30, 1984. An additional 4,018 acres were supervised from acreage previously contracted for improvement cutting.

Commercial projects were active on 8,870 acres during the year which returned \$4,786,170 to the Game Fund, an increase in excess of \$2,000,000 compared with the previous year's receipts. The average return was \$540 per acre improved. The various private, local economies received more than 29 million board feet of sawlogs and 221,000 tons of pulpwood from State Game Lands during the year, while at the same time habitat for wildlife in their respective areas was being improved.

### **Game Lands Management**

During the past fiscal year, 1,092 acres of herbaceous openings were planted to small

grain and grass legume combinations by Food and Cover Corps personnel. All of the grain planted was left standing for wildlife. An additional 10,215 acres were maintained by mowing. Other treatments included liming 1,290 acres, and the application of fertilizer on 1,530 acres to obtain the desired soil fertility. Winter cuttings of woodland borders totaled 928 acres. Also, 9,672 fruit producing trees were pruned. New construction included 16 miles of roads, 16 parking areas, 441 nesting structures, and 1,654 bird houses. Maintenance included 2,751 miles of roads, 5,498 parking areas and 1,433 miles of boundary lines. Sharecropping activity on game lands continues to play an important role in wildlife management; 21,299 bushels of ear corn and 11,302 bushels of shelled corn were received from sharecroppers. This was in addition to the amount of grain left standing by sharecroppers for use by wildlife.

### **Howard Nursery**

The Howard Nursery provided 3,826,730 tree and shrub seedlings for wildlife habitat improvements on State Game Lands and other public and private lands open to public hunting.

The Planting for Wildlife Program continues to be a success. In this fiscal year, 348,880 tree and shrub seedlings were distributed to persons interested in providing food and cover for wildlife.

Thirty species of tree and shrub seedlings are being grown at the nursery, including many native food producing trees and shrubs.

The wood shop, which is located at the nursery, is where all the wooden informational signs for use on State Game Lands are manufactured. Also constructed at the shop are the necessary posts and backboards used for posting the informational signs on our public access areas.

### **Land Acquisition**

During the past fiscal year, an additional 13,643 acres of State Game Lands were acquired in 18 counties at a cost of \$2,449,128. Several land exchanges among the conveyances contributed to this figure.

The total of all miscellaneous operational facility lands, such as the Game Farms, remains at 3,226 acres, purchased at a cost of \$314,046.

An additional 18,851 acres were purchased with Project 70 Funds during the years 1965-1980. The total area of all Game Commission holdings is now 1,268,722 acres in 273 separate Game Lands in 65 counties.

Our staff of four survey crews performs boundary line surveys for all land acquired by the Commission. They also survey disputed boundary lines and provide topographical surveys. The work of our real estate specialists, draftsmen, abstractor and legal counsel provides assistance in pursuing an aggressive acquisition program.

The Federal Land and Water Conservation Fund Act provides money for acquisition, planning and development of outdoor recreation projects. These funds are administered by the National Park Service, which during the past fiscal year provided \$71,050 on a 50-50 cost sharing basis for the purchase of 403 acres of additional State Game Lands. The federal government has provided funds for continuation of the program, but at a greatly reduced level.

### **Payments In-Lieu-Of Taxes**

Local governmental bodies received 60 cents per acre in-lieu-of taxes as required by Act 20 of 1984. During the past fiscal year, \$759,855 was divided in proportional payments to the county, school district and township where such lands are located.

### **Public Access Programs**

The Game Commission's public access programs continue to provide an increase of hunter access to private lands. The oldest program, the Cooperative Farm Game Program, started in 1937 and has 184 projects in 58 counties where we are cooperating with 19,849 landowners with over 2,300,000 acres open to hunting. We now have 10,200 cooperators covering over 1,600,000 acres in our Safety Zone Program, and much recreation was enjoyed by sports-persons making use of those lands. The Forest Game Cooperative Program now has over 630,000 acres and is keeping lands in essentially big game areas open to the sportsperson while helping to protect the landowner against unsportsmanlike acts.

None of these programs give hunters unlimited access to these private lands. Hunters should still contact cooperating landowners for permission and, out of courtesy, let them know who is on their properties.

The Commission has agreed to continue to provide ten-pound mixed seed packets to landowners who have the time and areas to plant them. The seed mixture of dwarf sorghum, millet, buckwheat and sunflowers provides a good source of food for all wildlife, and if properly located on the farm, can provide relief from depredation upon field crops. It is expected that this seed mixture will be provided free of charge

to cooperators and at the same time be made available for sale to the public.

### **Federal Aid**

The Federal Aid in Wildlife Restoration Act (Pittman-Robertson Fund) has continued to provide reimbursement for funds expended for approved wildlife management projects. The monies are derived from an excise tax on sporting arms, ammunition and archery equipment and administered by the Fish and Wildlife Service. These funds are then returned to the states which submit acceptable project proposals and contribute the most desirable benefits for all wildlife species. During the 1983-1984 fiscal year, we received \$5,484,688 as reimbursement from this Act.

The Endangered Species Act has provided for reimbursement of funds expended primarily on our Bald Eagle Recovery Project. This project was responsible for capturing a second group of 12 eaglets and returning them to Pennsylvania where they were raised until old enough to fly. The Indiana bat also received attention this year in the form of an updated survey of the wintering caves to determine present population levels.

### **Engineering And Contract Management Division**

This Division has the primary responsibility of planning, designing, specifying, contracting for, and inspecting all contracted maintenance work and new construction.

This past fiscal year, repairs and maintenance work were completed on various buildings throughout the Commonwealth in order to keep the structures in good conditions.

New work under six separate contracts included the construction of a timber column, wood framed building; renovation to four buildings; the drilling of two water wells for storage and headquarters building; and the installation of plumbing, heating and electrical facilities in an existing building.

### **Rifle And Pistol Ranges**

Thirty-three rifle ranges and 11 pistol ranges are maintained on State Game Lands in Pennsylvania. The ranges are open to the public without charge.

## **BUREAU OF LAW ENFORCEMENT**

**Gerald D. Kirkpatrick, Director**

The Law Enforcement Bureau is responsible for administering and coordinating the statewide wildlife law enforcement program. This involves, among other things, the apprehension and prosecution of Game Law violators, conducting administrative hearings in connection with hunting license revocations, investigating hunting accidents and processing them through the



judicial system, investigating and issuing a variety of special permits relating to wildlife, executing deer- and bear-proof fencing agreements and monitoring their installations, developing and reviewing ongoing and necessary amendments to the Game Law to meet current times and needs, maintaining and updating the Commission's two-way statewide radio system, and overseeing the deputy game protector program.

The Law Enforcement Bureau conducts a number of activities which are not generally associated with traditional law enforcement. The Bureau works closely with district game protectors. This, in itself, involves many non-law enforcement type activities. The district game protector's role requires that each be an effective communicator, able to present the Commission's many wildlife management programs. Each officer conducts hunter education programs, trapper training programs, assists with wildlife research projects, handles wildlife nuisance complaints, picks up and disposes of highway-killed deer and bears, assists the Pennsylvania Fish Commission, U.S. Fish and Wildlife Service, the State Police, and, in times of disaster, the Pennsylvania Emergency Management Agency. Game protectors also have many other duties related to wildlife management.

A major function of any law enforcement program is the apprehension and prosecution of persons who violate the law. The Bureau of Law Enforcement realizes that total compliance with all laws is unrealistic. With this in mind, the Bureau has adopted the following goal:

"To achieve and maintain an acceptable and reasonable level of compliance with the laws of the commonwealth relating to wildlife. Deliberate and intentional violators are vigorously pursued, apprehended and prosecuted."

The deliberate and intentional violator is the person who poses the greatest threat to our wildlife resources and, for obvious reasons, is receiving special attention. These are the kinds of violators that the true sportsman will not tolerate or condone.

During the 1983-84 fiscal year, Commission officers had a rather active year. They apprehended and cited 13,999 persons for a variety of Game Law offenses. As a result, over one-half million dollars in penalties was collected and deposited in the Game Fund. In addition, several hundred persons were denied the privilege to hunt and trap for periods ranging from one year to several years, depending upon the severity of each case. Of these caught violating the Game Law, 60 percent settled on field acknowledgements of guilt and paid their penalties to a local game protector. The remaining 40 percent were processed through the court system.

**Director GERALD KIRKPATRICK, shown here with LINDA SHEAFFER, is responsible for coordinating the Commission's Law Enforcement programs.**

Of these, 90 percent were successful prosecutions. Overall, this gives a 98 percent conviction record for all persons apprehended and cited for violating the Game Law. This enviable record suggests a high degree of professionalism and expertise among our game protectors and deputies.

The Bureau is continually evaluating the law enforcement reporting system and, where possible, is revising law enforcement reports in an effort to reduce the paperwork required of Commission field officers, thereby releasing them for more work in the field.

### **In-Service Training**

To have well trained and professional officers in the field of conservation law enforcement, the Bureau has a permanent commitment to provide annual in-service training and such other training as can be arranged. In-service training is aimed at keeping Commission officers informed of the latest methods and techniques employed in wildlife law enforcement. During 1984 the Bureau conducted six two-day training sessions at our training school at Brockway. In addition to updating policies and procedures, approximately twelve hours were spent on unarmed self-defense training and night firearms training.

Other training consisted of various in-service and out-service sessions by our own qualified instructors or qualified outside instructors.

### **Deputy Game Protectors**

Pennsylvania is privileged and proud to have an auxiliary wildlife management corps known as deputy game protectors. This group is unequaled in the world. Members are civilians, from all walks of life, who wish to share their spare time in the interest of wildlife management. Deputy game protectors in private life are doctors, lawyers, accountants, engineers, farmers, factory workers, etc. The present complement of deputies is approximately 1,100.

Deputy game protectors, like full-time district game protectors, face the never-ending need of



Subscribe to

## GAME NEWS

For a Friend . . .

ongoing specialized training in wildlife law enforcement and related wildlife management programs. Among them are mandatory training sessions designed to increase the professional standards of these public servants. We issue uniform equipment to qualifying deputies. Services rendered free of charge to the Commission, sportsmen, and citizens of the commonwealth by deputy game protectors are valued at several million dollars a year. The Commission is indeed grateful to this group. Standard lesson plans were assembled for training this group, thereby insuring uniform interpretation of policies, laws and regulations.

### Deer And Elk Proof Fencing

Under provisions of the Game Law, the Commission may expend up to \$25,000 annually for the purchase of deer and elk deterrent fencing. Fencing wire and fasteners are furnished to qualifying farmers and orchardists under written agreement with the Commission. The Commission currently is furnishing high tensile strength wire and fasteners to erect deer and elk deterrent fences. The fence design was developed by Penn State and is commonly referred to as the "Penn State Five Wire." It is electrified like cattle fence.

During fiscal year 1983-84, the Commission executed eleven deer proof fencing agreements and furnished the necessary wire and fasteners to install these fences.

As a result of recent amendments to the Game Law effective October 4, 1984, the Commission may now expend up to \$35,000 annually for the purchase of fencing, posts, staples, electric generators and other material necessary for the erection of deer, elk or bear deterrent fences. Prior to the amendments, only wire and staples could be furnished.

### Bear Damage

In 1982 the General Assembly amended the Game Law, increasing to \$50,000 the total amount which the agency may expend annually from the Game Fund for bear damage. Payment is authorized for bear damage to poultry, livestock, bees and beekeeping equipment.

During this fiscal year, payments totaling \$42,915 were made, a \$500 increase over the previous year's total. Bees and beekeeping equipment suffered the most damage as 629 beehives were destroyed by bears. In addition, bears also killed a variety of livestock totaling 166 animals.

The incidence of bear damage increased

through the fall and early winter of this time period, and picked up again in the spring when bears were emerging from hibernation. The lack of natural foods at these times was a direct cause of the increased number of claims submitted.

To further reduce bear damage our officers worked 3,895 hours servicing 1,134 incidents involving bears. In the process, 109 bears were trapped and moved, and 24 deterrent fences were erected to guard against bear damage.

Many bear nuisance complaints stemmed from people feeding bears. This practice not only is dangerous but also is detrimental to the bear. Some bears quickly become acclimated to people, associate them with food, and then seek out the opportunities which cause problems. Bears also do not realize when the feeding is over, and attempt to grab more from the person, causing anxious moments and injuries. People who put food out for bears near or around buildings create problems for others who do not want bears near their establishments. The bears become accustomed to getting or finding food near buildings and seek them out, causing much concern for other people.

All these problems can be avoided by a few simple precautions: Do not feed bears under any circumstances, and keep garbage and other foodstuffs confined so bears are unable to get to it.

### Two-way Radio

The Bureau of Law Enforcement is updating and modernizing our two-way radio system in the Southcentral and Southeast Regions.

The changes were necessitated by new requirements of the Federal Communications Commission and to replace timeworn equipment which had been installed in the mid '50s.

The Commission's statewide two-way radio system is an invaluable communications network to administer our wildlife management programs. Law enforcement is a primary user of the radio system.

### Special Permits

The Game Law provides for the issuance of a variety of special permits to accommodate and regulate numerous activities involving wildlife. In many cases the fees established by law do not cover the administrative costs required to prepare and issue the documents. We are optimistic that this inequity will be corrected by the General Assembly to meet present-day economics. The following permits were issued during the 1983 fiscal year:

Collecting—		
Gratis . . . . .	18	\$ 0
Fee . . . . .	22	220
Disabled Person to Hunt		
from Automobile . . . . .	1,426	1,426
Dog Training . . . . .	152	3,040
Falconry . . . . .	105	1,050
Field Trial . . . . .	116	580
Fox Hunting . . . . .	30	1,500



Fur Dealer .....	315	7,875
Fur Dealer Employee .....	43	430
Fur Dealer, Nonresident .....	19	1,900
Fur Farming .....	72	1,080
Propagating .....	514	7,735
Regulated Shooting Grounds—		
Private .....	154	6,610
Commercial .....	36	2,665
Release & Retrap Quail .....	52	520
Retriever Trial .....	53	795
Menagerie—		
Gratis .....	5	0
Fee .....	62	6,200
Spec. Retriever Dog Train- ing Area .....	8	280
Taxidermy .....	416	10,400
Permit To Mount		
Protected Specimen—		
Gratis .....	23	0
Fee .....	168	336
Wildlife Dealer .....	9	3,900
Wildlife Possession .....	39	7,950
	3,857	\$66,492

## Bureau of Law Enforcement Creed

I am proud to be able to look each member of the Commission or any other person in the eye and to say, without fear of successful contradiction, that we have tried in all ways to be fair and just to all men; that we have tried to interpret the law fairly and according to what we consider its spirit rather than its literal wording; that we have allowed no officer to use his position to persecute rather than prosecute, or to wrong anyone, and have shown no partiality to any living person for any reason.

## BUREAU OF MANAGEMENT INFORMATION SYSTEMS

**Lyle M. Koons, Jr., Director**

Because of increasing data processing workload and the spread of automation throughout the agency, the Data Center has been removed from the Bureau of Administrative Services and



**LYLE KOONS**, right, shown here with **RANDY COLDEN**, is Director of the Commission's new Bureau of Management Information Systems.

organized into the Bureau of Management Information Systems. The organization consists of three divisions.

The Technical Services Division provides all systems analysis, computer programming, communications programming, data base management, systems software and office automation support for the agency.

The Data Control Division provides data analysis, data entry, and output analysis support. This Division is responsible for completeness and accuracy of data and proper distribution of reports.

The Operations Division provides computer operations and network services to the agency. The Division ensures that all computer programs are run on a timely basis and that all equipment is functioning properly.

The Bureau maintains an electronic file of over 630,000 records of all types, and it takes some 230 computer programs to keep things up to date. There are computer terminals in all Regional offices and Headquarters offices that generate about 677,000 transactions per year.

We will continue to provide the best possible service at the least possible cost.

## PGC FINANCIAL REPORT—JULY 1, 1983 to JUNE 30, 1984

### Game Fund

Total revenue received during the 1983–84 fiscal year was \$32,544,009, an increase of \$3,611,466 over last year's revenue. Increased revenues from the sale of timber, stimulated by the Commission's making more lands available for cutting, and Federal aid reimbursements were the sole contributing factors to this increase. All other categories reflected minimal increases or decreases.

Expenditures and commitments totaled \$37,712,665, increasing \$3,892,465 from fiscal year ending June 30, 1983. This June 30, 1984, total includes the initial commitment of

\$4,900,000 for the construction, engineering, design and administration of the new headquarters building on a site owned by the Commission in Harrisburg. However, excluding this building commitment, 1983–84 costs were reduced \$1,000,000, which resulted from program budget cuts implemented by Commission management. Operational expenses decreased approximately \$800,000, while personnel services and fixed assets decreased approximately \$100,000 each.

The unreserved fund balance as of June 30, 1984, was \$14,921,086, a decrease of \$3,807,763

from the unreserved fund balance at the end of the previous fiscal year. It should be noted that this year-end fund balance is the lowest in nearly a decade.

Act 271 of the Game Law provides that not less than \$1.25 from each resident hunter's paid license fee shall be used solely for the selection, restoration, rehabilitation and improvement of lands available for public hunting, to provide and improve habitat for the purpose of producing natural propagation of wildlife. Resident licenses sold during the 1983-84 fiscal year totaled 1,195,886. This mandated that a minimum of \$1,494,858 be expended for the above-mentioned purposes. Actual expenditures totaled

\$2,628,298, an excess of \$1,133,440 over the minimum requirements of this Act.

Act 632 of the Game Law states that \$1 of each fee collected for issuing resident and nonresident hunter's licenses and tags for antlerless deer shall be used solely for cutting or otherwise removing overshadowing tree growth, to produce underbrush sprouts and saplings for deer food and cover on game land. Antlerless deer license sales for the 1983-84 fiscal year totaled 523,868. This mandated that a minimum of \$523,868 be expended for the above-mentioned purposes. Actual expenditures for the above totaled \$1,443,361, an excess of \$919,493 over the minimum requirements of this Act.

## GAME FUND BALANCE SHEET, JUNE 30, 1984

### ASSETS

Cash with Treasurer .....	\$ 1,157
Temporary Investments .....	24,539,001
Petty Cash Advances .....	278,000
<b>Total Assets .....</b>	<b><u>24,818,158</u></b>

### LIABILITIES, RESERVES AND FUND BALANCE

Vouchers Payable .....	\$ 278,781
Reserve for Restricted Receipts .....	632,126
Reserve for Restricted Revenue .....	34,822
Reserve for Current Encumbrances .....	8,951,343
Unreserved Fund Balance .....	14,921,086
<b>Total Liabilities, Reserves and Fund Balance .....</b>	<b><u>24,818,158</u></b>

## STATEMENT OF UNRESERVED FUND BALANCE FOR THE FISCAL YEAR ENDING JUNE 30, 1984

Unreserved Fund Balance, June 30, 1983 .....	\$18,728,849
<b>ADD:</b>	
Revenue subject to Executive Authorizations ...	\$26,847,096
Prior Fiscal Year's encumbered Executive Authorizations unused .....	1,360,893
<b>Total beginning fund balance and additions .....</b>	<b><u>28,207,989</u></b>
<b>DEDUCT:</b>	
1983-84 Executive Authorizations .....	\$32,340,000
Less 1983-84 Executive Authorizations unused at year-end closing .....	324,248
<b>Net deductions .....</b>	<b><u>32,015,752</u></b>
<b>Unreserved Fund Balance, June 30, 1984 .....</b>	<b><u>14,921,086</u></b>

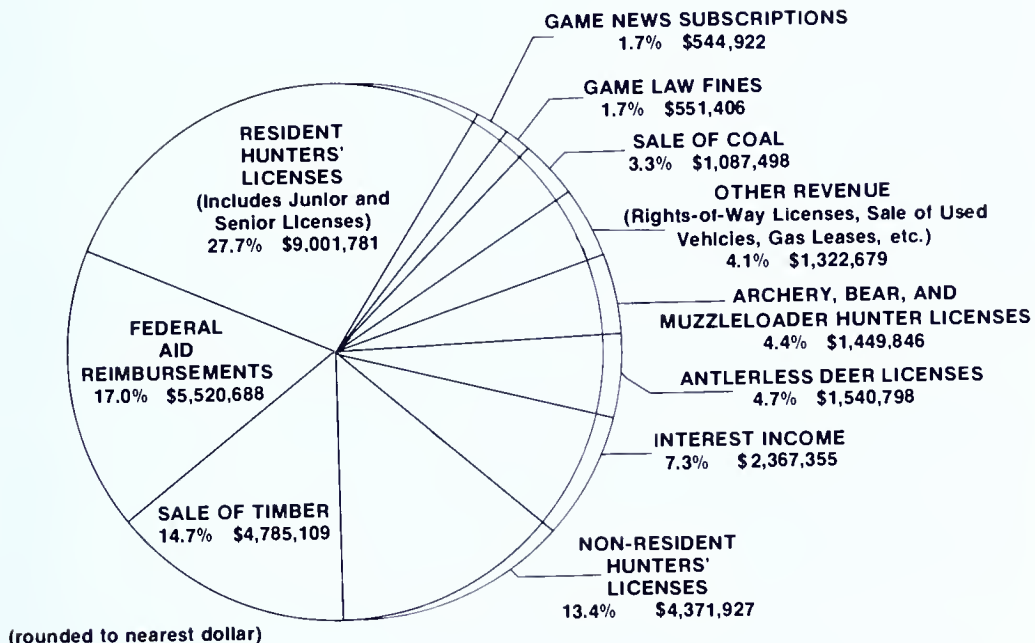
## SCHEDULE OF REVENUE DEPOSITED IN GAME FUND FOR FISCAL YEAR ENDED JUNE 30, 1984

### LICENSES AND FEES:

Resident Hunting Licenses—Adult .....	\$ 7,924,176
Resident Hunting Licenses—Junior .....	726,234

(Continued on page 22)

**GAME COMMISSION REVENUE**  
**\$32,544,099**  
**JULY 1, 1983 TO JUNE 30, 1984**



**GAME COMMISSION EXPENDITURES AND COMMITMENTS**  
**\$37,712,665**  
**JULY 1, 1983, TO JUNE 30, 1984**



Resident Hunting Licenses—Senior .....	351,372
Nonresident Hunting Licenses .....	4,371,927
Antlerless Deer Licenses .....	1,540,798
Archery Licenses .....	595,866
Resident Bear Licenses .....	493,370
Nonresident Bear Licenses .....	19,365
Muzzleloader Hunting Licenses .....	341,245
Special 3-Day Nonresident Regulated Shooting Grounds Licenses .....	5,456
Hunting Licenses—Issuing Agents' Application Fees .....	42,156
Nonresident Trapping Licenses .....	700
Special Game Permits .....	53,983
Rights-of-Way Licenses .....	226,423
Total Licenses and Fees .....	<u>\$16,693,071</u>
<b>FINES AND PENALTIES:</b>	
Game Law Fines .....	\$ 551,406
<b>MISCELLANEOUS REVENUE:</b>	
Sale of Timber and Other Wood Products .....	\$ 4,785,109
Interest on Securities and Deposits .....	2,367,355
Sale of Coal .....	1,087,498
Sale of GAME NEWS .....	544,922
Miscellaneous (Prior year expenditure refunds, donations, rental of state property, sale of unserviceable and non-usable property, etc.) .....	250,062
Waterfowl Management Stamp Sales .....	157,698
Royalties and Ground Rentals from Gas and Oil Leases .....	96,575
Wildlife Promotional Publications and Materials .....	88,766
Working Together for Wildlife Program .....	87,814
Sale of Skins and Guns .....	72,086
Sale of Grain and Hay .....	64,734
Total Miscellaneous Revenue .....	<u>\$ 9,602,619</u>
Total Revenue Subject to Executive Authorizations .....	<u>\$26,847,096</u>
<b>AUGMENTATIONS TO EXECUTIVE AUTHORIZATIONS:</b>	
Federal Aid Reimbursements for Wildlife Restoration, Recreation, Research and Land Acquisition .....	\$ 5,520,688
Sale of Used Automobiles and Other Vehicles .....	176,225
Total Augmentations .....	<u>\$ 5,696,913</u>
<b>GRAND TOTAL OF ALL REVENUE DEPOSITED IN GAME FUND..</b>	<u><u>\$32,544,009</u></u>

**GAME COMMISSION EXPENDITURES & COMMITMENTS**  
**FUNCTIONAL PROGRAM ACTIVITIES**  
**FISCAL YEAR 1983-84**

<b>EXECUTIVE OFFICE .....</b>	<b>\$ 300,904</b>
<b>COMPTROLLER OPERATIONS .....</b>	<b>468,232</b>
<b>ADMINISTRATION:</b>	
Construction, Engineering and Design of Headquarters Building .....	\$4,900,000
Field Division Offices .....	1,288,828
Hunting License Section .....	875,960
Data Processing .....	583,227
Personnel Section and Labor Relations Activities .....	351,761
Internal Stores and Mailroom .....	266,032
Training School and Educational Training Programs .....	162,552
Procurement Section .....	<u>80,041</u>
	<b>8,508,401</b>



**INFORMATION AND EDUCATION:**

Conservation Education .....	\$ 849,539	
Pennsylvania GAME NEWS .....	758,642	
Hunter-Trapper Education .....	218,786	
Public Information and Exhibit Sections .....	146,854	
Non-Game Wildlife and Endangered Species Programs .....	121,723	
Photography—Audio/Visual Operations .....	116,009	
Administration—Harrisburg .....	114,385	2,325,938

**GAME MANAGEMENT—PROPAGATION:**

Ring-necked Pheasant Program .....		2,794,298
------------------------------------	--	-----------

**GAME MANAGEMENT—RESEARCH:**

Deer and Elk Studies .....	\$ 251,937	
Black Bear Study .....	218,879	
Ruffed Grouse and Pheasant Habitat Research Projects .....	152,091	
Wildlife Technician Activities .....	147,499	
Waterfowl Research Project .....	114,870	
Turkey Study .....	113,844	
Furbearer Research Project, Small Game Harvest Survey and Rabbit Study .....	103,182	
Non-Game Wildlife and Endangered Species Programs .....	21,947	1,124,249

**LAW ENFORCEMENT:**

General Law Enforcement and Training .....	\$3,420,127	
Administration .....	1,574,102	
Deputy Law Enforcement and Training .....	921,505	
Servicing Wildlife Complaints, Removal and Disposal .....	608,122	
Radio System .....	457,450	
Assistance to Other Commonwealth Law Enforcement Agencies .....	58,463	
Non-Game Wildlife and Endangered Species Programs .....	15,140	7,054,909

**LAND MANAGEMENT:**

Land Acquisition Program .....	\$4,529,583	
General Administration and Supervision .....	3,187,988	
Maintenance and Construction (Road, Trail, Parking Lot, Bridge, etc.) .....	1,962,788	
Forest Management .....	1,807,776	
Automotive and Equipment Maintenance .....	1,047,613	
Public Access and Safety Zone Programs .....	920,549	
Food Plots .....	591,957	
Federal Aid .....	377,670	
Howard Nursery .....	202,738	
Minerals Resource Recovery and Manage- ment and Rights-of-Way Programs .....	117,226	
Training and Safety Programs .....	109,651	
Environmental Impact Assessment Program .....	105,654	
Non-Game Wildlife and Endangered Species Programs .....	89,701	
Controlled Shooting Areas .....	78,840	15,129,734

Treasury Department—Replacement Checks .....		6,000
--	--	-------

<b>TOTAL EXPENDITURES AND COMMITMENTS .....</b>		<b>\$37,712,665</b>
---	--	---------------------

## P.G.C. EXPENDITURES AND COMMITMENTS

Incurred July 1, 1983, to June 30, 1984, from Current Appropriations

Salaries and wages .....	\$14,235,186
State share employe benefits .....	5,434,185
Construction, engineering, design and administration of new headquarters building .....	4,900,000
Land purchases and acquisition costs .....	3,745,080
Automotive repairs, supplies, and rentals .....	1,142,615
Printing and advertising .....	1,131,611
Maintenance and improvements of buildings, grounds, and machinery .....	765,831
Purchase of trucks, automobiles, and jeeps .....	643,874
Pheasant, turkey, and duck feed .....	546,517
Payments to other State agencies:	
Comptroller services rendered .....	413,168
Auditing services .....	90,437
Personnel services .....	40,576
Purchasing services .....	14,296
Checkwriting and disbursement services .....	8,785
Payments to local municipalities in-lieu-of taxes .....	488,322
Building rentals and land rights-of-way lease payments .....	434,026
Postage .....	388,405
Office equipment, maintenance, rentals, and supplies .....	373,300
Legal, appraisal, and consulting fees .....	356,529
Telephone expenses .....	339,271
Heating, power and light .....	319,078
Travel and special conference expenses .....	305,597
Radio and communications equipment purchases and contracted maintenance service .....	278,296
Wildlife habitat seedlings and plantings .....	256,713
Electronic data processing contractual services, rentals and purchases .....	227,386
Uniforms for Game Commission personnel .....	206,148
Educational supplies, literature, and classroom training equipment .....	167,450
Purchase of equipment and machinery .....	138,406
Other supplies (laboratory, ammunition, etc.) and services .....	113,169
Research grants to universities and wildlife associations .....	102,434
Insurance—auto, liability, fidelity .....	64,854
Payments to individuals for bear damage claims .....	35,120
GAME FUND GENERAL OPERATIONS TOTAL .....	\$37,706,665
Replacement Checks, Treasury Department .....	6,000
GAME COMMISSION TOTAL .....	<u>\$37,712,665</u>

Note: Outstanding commitments as of June 30, 1984, totaled \$8,951,343, which may be subject to cancellation pending contingencies overstated, goods not delivered and services not rendered, or recommitment to the succeeding fiscal year.

# young artists page



**Black Bear Cub  
Nicolle Dellen  
Columbia, Pa.  
Holy Trinity School  
8th Grade**

**Pheasants  
Lisa Shields  
Corsica, Pa.  
Brookville Area High School  
10th Grade**







BOB  
SORCHICK



# A Morning After Foxes In January

By Bob Stortenbecker

**T**HUMP, THUMP, THUMP . . . the sound of my wife's broomhandle on the ceiling notifies my teenage son it is time to roll out of a warm bed and get ready for school. It also serves notice to me that if I want to have a hot breakfast before I run my fox line, I'd better get up now.

A cup of hot coffee greets me at the kitchen table. (What would I ever do without her?) A sip or two to help un-hinge my eyelids, then out on the porch for a glance at the thermometer. It shows 11 below! Halfway through my second cup of coffee, the gray of dawn begins to appear outside the window. As the treetops at the far end of the field begin to take shape, I can see there is a breeze that will probably give us a wind chill factor around the -30 mark. I think of several friends who have gone south for the fair weather trapping of New Mexico and Arizona. That's their style, this is mine.

Conversation around the table is centered on the old groundhog and how everybody hopes it will be cloudy on February 2. My mind is elsewhere.

Cabin fever seems to be setting in with the rest of the family. Not so with me. If you're a trapper, you understand.

I had made a series of fox sets at key locations the day before, anticipating the two inches of fresh snow the weatherman promised. Making sets when snow is forecast is a good idea; if you make any mistakes or leave any sign, the snow will cover it up.

My trapping season is usually split in two. The first session usually begins in early November and continues until Thanksgiving. This is usually the best part of the season in terms of foxes caught, because more are out there and the weather is milder. That makes it a

lot easier to keep your sets operating. However, it also means more trappers are competing for the same foxes.

On Thanksgiving Day I usually put out my muskrat and mink sets for the weekend. This serves to sweeten the fur check some and gives the fox a rest. Deer season takes up two more weeks. Trapping during this time is usually a losing proposition because of all the people in the woods.

The "second" season is the most enjoyable for me. Not because the trapping is better, for it isn't. There are fewer fox and the ones out there have survived a lot of pressure and are much wiser than they were in November. January also provides the harshest weather of the season. As a consequence, it is harder to keep your sets operating. This period is most enjoyable for me because, outside of the occasional hunter in the early part of the month, I am virtually alone.

## Back In The Kitchen

Meanwhile, back in the kitchen, my wife starts the eggs. I slip on my boots and coat to go start the truck. It grunts and grinds, but it starts. The scraper is necessary for the fresh snow that the weatherman predicted. As I return to the kitchen, my daughter is wondering why all the schools except hers are closed for the day. My eggs are ready and I eat them fast. A kiss for my wife, then I'm off.

My first sets were on my neighbor's farm just down the road. As I turned onto the farm road that led to the top of the mountain, I realized I had forgotten my camera. That's okay, I tell myself, there probably won't be much up and around in this weather anyway.

The last corner at the top brought me

within sight of my two sets. I like to check them from as far away as possible, so out came the binoculars. Nothing. I swung the truck around to go back down, and as I rounded the second turn, there they were. Five turkeys. So much for forgetting the camera. Close enough for a good picture, too. Where were they back in November? I watched them for several minutes as they made their way across the ridge. One final look as I rounded the last turn put me down over the bank. I slid sideways for about twenty feet, but managed to get stopped just before lodging against a large maple tree. Getting out, I tried to figure out how I was going to get out of this without going for my neighbor and his tractor. Studying the situation, it didn't appear I was stuck too badly. I got back in, put it in reverse and, praise the Lord, it backed right out.

On the hard road again, I proceeded to my next location. This was at the far end of a large swamp. An old logging

road led to my sets and took me up to the side of a mountain once again. I watched the road this time and managed to make it to the top. The road forked just beyond an old stonewall. I had made two sets here, one on each side of the road. As the truck bounced over the last rise I smiled at the first fox of my "second" season. Nothing prettier than a prime January gray. "Dummy, where's your camera?" I said.

### Re-Made Set

Dispatching the fox, I re-made the set, put him in the back of the truck and headed for the end of the right fork where I had two more sets. This was only about five hundred yards farther, where the road ended at the swamp.

About halfway there I noticed fox tracks entering the road from a saddle deer followed from the swamp to the ridge. Just as they hit the road they made a hard left turn and headed down the road toward my sets. My scent was working well.

When the sets came into view, there was the second fox. But he had company. Stinky company. What a skunk was doing out in this kind of weather is beyond me, but sure enough, there he was. This presented a problem. The skunk was in the near trap and the fox, another gray, was in the far trap, and I could see I had him by only a toe.

The fox being the most valuable, I wanted to make sure not to lose him. Taking a wide swing around the skunk would have left too much sign in the fresh snow. After a little thought—very little—I decided to try to ease by the skunk, as far away as I could get without going outside the boundaries of the road. This way, any sign I left could easily be covered up with the truck. Fox don't seem to be bothered by tire tracks.

I got out of the truck slowly, not wanting to alarm the fox as one good lunge would have set him free. I cautiously started around the skunk. He didn't seem bothered by my presence, although he was keeping an eye on me. Just as I thought I was safely past and had turned my full attention on the fox,

**CROSSING THE** frozen beaver dam would cut about a quarter-mile off the walk to a couple of my sets, and the two small game hunters hadn't had any trouble. . . .



I smelled it. If you're that close, by the time you smell it, it is too late.

If you've ever been treated by a skunk, you know that just because he got you on only one side doesn't mean the rest of you smells okay. That darn stuff penetrates everything.

When I turned back around to attend to the fox, he was giving me that "you dummy" look. So, I took care of him and his friend, re-made the sets and made my way back down the mountain. Safely this time, but with the windows wide open. I thought about going home to change clothes, but didn't think my wife would let me in.

Off to the next location. This one was on a Game Lands near my home in Bradford County. Some walking was required to check these traps, but I was being overcome by the odor in the truck anyway. (Just too cold to keep the windows down.) As I pulled into the parking area, I saw that another car had arrived before me. Two sets of boot tracks in the snow headed in the direction of my sets. On with the packbasket, and off I went.

It was about a mile to my sets, half of it uphill. There is a beaver dam at the halfway point, and when it is frozen crossing the ice cuts about a quarter-mile off the walk.

Rounding the final turn in the trail before the dam, I came face to face with the two hunters. This was the last day of the late small game season and they had been trying their luck. They had one grouse and two squirrels for their efforts.

"Yuk," the one guy said. "What did you fall into?"

This set his friend to laughing.

I managed a faint smile just to be friendly. "How did that ice feel to you guys?"

"Fine, you shouldn't have any problem."

"Thanks, see you later."

It hadn't been long since we'd had a thaw, and there had been a good deal of rain, so I was a little shy about the ice. It should be okay, I thought, they made it across. I took a few steps out

onto the pond and it felt fine. About a dozen steps further and, splash! Waist deep. So much for good ice.

Needless to say, going through the ice isn't fun at any time, but when the temperature is about zero it's downright dangerous. There isn't time to stand there and debate what to do. I got myself out of the water, and in moments my clothes were frozen solid from the waist down. Hurriedly, I checked my sets—nothing—and headed back for the truck, fast.

Since I didn't have far to go, I wasn't too worried, but it doesn't pay to take chances when the temperature is so low. If you forget about the skunk and my trip over the bank, and going through the ice, it had been a pretty good day up to this point, and I didn't want to spoil it with a case of frostbite.

I took my usual route back to the truck, below the dam. It's farther, but downhill most of the way, so I was able to move along pretty quickly. That kept my blood circulating well and the shivering soon stopped.

*Zip!* That's the only word I can think of to describe the movement as I reached the lone pine at the foot of the hill. There it was again—a mink, and a big one. He was hunting and didn't see me. Cold or not, I had to watch. The opportunity to watch a mink in the wild doesn't come very often, especially one on a hot track.

### Mink's Secret

The object of his attention became apparent when a mouse emerged from a hole in the breastwork of the dam. How the mink managed to get through the same hole as the mouse is his secret, but sure enough, here he came. For what seemed like several minutes, the chase continued in and out of the various nooks and crannies of the dam. I was beginning to think the mouse was going to win, when I heard the squeal. Not very loud and not very long. No mouse. No mink. Just silence. Some of the places the mink had managed to squeeze through were so small you had to see it to believe it. He moved with a





**ZIP!** That's the only word I can think of to describe the movement as I rounded the lone pine at the foot of the hill. There it was again—a mink and a big one.

speed and grace and a single-minded purpose that rivaled any predator I've ever seen. I learned a lot about how to trap mink that morning.

It took me ten more minutes to get to the truck. The engine hadn't fully

cooled down as yet, and the heater at full blast soon had me warmed up and at least partly thawed out. I debated the advisability of checking the rest of my line or going home to change clothes first. Since I had only two more locations and both could be checked from the truck, I decided to finish up.

Nothing much of any consequence had happened. I'd missed a fox at one location and the last had had no activity at all. I headed for home.

My wife and daughter were at the kitchen window. Seeing the two fox brought smiles from both. As it turned out, my daughter was smiling more about an announcement on the radio of "no school" than she was about the foxes.

Their smiles disappeared as I entered the house. Remember the skunk? "Get out on the porch and get those clothes off!"

A fella expects a hug or something from the ones who spend the fur check, but I couldn't blame them. I wouldn't have hugged me either.

---

## WHITE-TAILED DEER: Ecology and Management

The Wildlife Management Institute, which over just the past several years has produced three award winning publications—*Big Game of North America*, *Mule and Black-tailed Deer of North America*, and *Elk of North America*—has now released what they consider their most ambitious publication yet—*WHITE-TAILED DEER: Ecology and Management*, edited by Lowell K. Halls. This 896-page volume will certainly be the authoritative text on our most popular big game animal for many years to come. Over 70 authors contributed to the book's 42 chapters, providing readers with the most up-to-date information on all aspects of the species' natural history and management. From the evolution of deer in North America and the animal's importance to Indian cultures across the continent, the reader will find chapters on physiology and nutrition, behavior, and predation. Other sections cover population dynamics, habitats, research and management practices, whitetail benefits, and future needs and opportunities. Although this book is tended for wildlife management students and professionals, it was written and designed to also appeal to sportsmen and other wildlife enthusiasts. Supplementing the text are over 450 photographs, 137 figures, 118 tables, and a 16-page collection of full-color reproductions of white-tailed deer artwork. *WHITE-TAILED DEER: Ecology and Management*, Stackpole Books, Cameron and Kelker Sts., Harrisburg, PA 17105. \$39.95 (plus 6% sales tax in Pennsylvania) and \$2.50 for shipping and handling.

# QUESTIONNAIRE

Dear GAME NEWS Subscriber:

**W**E WOULD LIKE to make GAME NEWS even more interesting, informative and useful to readers than it already is. To do this, we are asking subscribers to take a few minutes to fill out this questionnaire. Your help will be greatly appreciated. In return for your cooperation, we will extend your GAME NEWS subscription three issues if you will get this material back to us within two weeks. To do this, we will need your name, address and subscription number as it appears on your current GAME NEWS mailing label.

Feel free to add comments on a separate paper.

Hope to hear from you.



Bob Bell  
GAME NEWS Editor

---

---

---

---

---

## GAME NEWS

1. For how many years have you been receiving GAME NEWS? \_\_\_\_\_

2. Number, age and sex of persons who read your copy of GAME NEWS:

Under 12	12-16	17-40	41-65	Over 65
M__ F__	M__ F__	M__ F__	M__ F__	M__ F__

3. Do you regularly read the following GAME NEWS features?

	Yes	No		Yes	No
Editorial	<input type="checkbox"/>	<input type="checkbox"/>	Archery (Keith Schuyler)	<input type="checkbox"/>	<input type="checkbox"/>
Field Notes	<input type="checkbox"/>	<input type="checkbox"/>	Guns (Don Lewis)	<input type="checkbox"/>	<input type="checkbox"/>
Conservation News	<input type="checkbox"/>	<input type="checkbox"/>	In the Wind	<input type="checkbox"/>	<input type="checkbox"/>
OWL (Bill Einsig)	<input type="checkbox"/>	<input type="checkbox"/>	(Bob Mitchell)		
DGP Diary	<input type="checkbox"/>	<input type="checkbox"/>	Annual Report	<input type="checkbox"/>	<input type="checkbox"/>
Thornapples	<input type="checkbox"/>	<input type="checkbox"/>	(January issue)		
(Chuck Fergus)					

(Continued)

4. Would you like to see more, less, or about the same of the following subjects in GAME NEWS?

	More	Less	Same
Game Commission programs and activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildlife management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildlife natural history	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How-to-do-it articles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where-to-go articles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deer hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bear hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small game hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waterfowl hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turkey hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Varmint hunting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trapping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dog articles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trophy photos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other subjects you'd like:	<hr/>		

5. How do you feel about the use of outdoor-related advertising in GAME NEWS?    Favor ☐    Oppose ☐    No opinion ☐

6. Would you like color art and photos in GAME NEWS?    Yes ☐    No ☐

7. Would you like GAME NEWS to be changed from its 6 x 9 size to an 8¼ x 11-inch format?    Yes ☐    No ☐

8. The use of full color and/or a size change would add to our production costs. If made, should such changes be financed by  
Increased Subscription Cost ☐    Advertising ☐    Other ☐

9. Which outdoor magazines besides GAME NEWS do you subscribe to or buy regularly?

Outdoor Life ☐    Field & Stream ☐    Sports Afield ☐  
Pennsylvania Sportsman ☐    Pennsylvania Outdoors ☐  
Fin & Feathers (Pa. edition) ☐    Northeast Hunting & Fishing ☐  
Others 

---



**HUNTING AND TRAPPING**

1. Do you regularly hunt in Pennsylvania?      Yes ☐      No ☐
2. How many persons in your household hunt? \_\_\_\_\_
3. Do you and/or members of your household specifically hunt the following in Pennsylvania? Please don't answer yes to game species taken only occasionally while hunting another species.

	Yes	No		Yes	No
Cottontail rabbits	<input type="checkbox"/>	<input type="checkbox"/>	Woodchucks	<input type="checkbox"/>	<input type="checkbox"/>
Snowshoe hares	<input type="checkbox"/>	<input type="checkbox"/>	Raccoons	<input type="checkbox"/>	<input type="checkbox"/>
Squirrels	<input type="checkbox"/>	<input type="checkbox"/>	Foxes	<input type="checkbox"/>	<input type="checkbox"/>
Ruffed Grouse	<input type="checkbox"/>	<input type="checkbox"/>	Deer	<input type="checkbox"/>	<input type="checkbox"/>
Pheasants	<input type="checkbox"/>	<input type="checkbox"/>	Bear	<input type="checkbox"/>	<input type="checkbox"/>
Doves	<input type="checkbox"/>	<input type="checkbox"/>	Crows	<input type="checkbox"/>	<input type="checkbox"/>
Woodcock	<input type="checkbox"/>	<input type="checkbox"/>	Ducks	<input type="checkbox"/>	<input type="checkbox"/>
Gobblers (spring)	<input type="checkbox"/>	<input type="checkbox"/>	Geese	<input type="checkbox"/>	<input type="checkbox"/>
Turkeys (fall)	<input type="checkbox"/>	<input type="checkbox"/>	Quail	<input type="checkbox"/>	<input type="checkbox"/>

4. Approximately how many days per year do you hunt in Pennsylvania? \_\_\_\_\_  
Approximately how many days do you and your family in total hunt in a year? \_\_\_\_\_
5. Approximately how much money do you spend annually on hunting and related expenses such as guns, ammo, clothing, travel, licenses, etc.?  
\$\_\_\_\_\_ per family,      \$\_\_\_\_\_ per individual
6. How many miles per year do you drive in connection with hunting and/or trapping? \_\_\_\_\_
7. Do you use Pennsylvania State Game Lands for:

	Yes	No		Yes	No
Hunting	<input type="checkbox"/>	<input type="checkbox"/>	Horseback riding	<input type="checkbox"/>	<input type="checkbox"/>
Hiking	<input type="checkbox"/>	<input type="checkbox"/>	Birdwatching	<input type="checkbox"/>	<input type="checkbox"/>
Photography	<input type="checkbox"/>	<input type="checkbox"/>	Dog training	<input type="checkbox"/>	<input type="checkbox"/>
Snowmobiling	<input type="checkbox"/>	<input type="checkbox"/>	Nature study	<input type="checkbox"/>	<input type="checkbox"/>
Trapping	<input type="checkbox"/>	<input type="checkbox"/>	Other _____		

8. Do you trap in Pennsylvania?      Yes ☐      No ☐
9. Including you, how many in your household trap? \_\_\_\_\_  
Ages      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_

10. For what species do you trap? \_\_\_\_\_

(Continued)

DEER HUNTING AND GUNS

1. For how many years have you been hunting deer? \_\_\_\_\_
2. How many deer have you legally taken in Pennsylvania during your hunting career?    Antlered \_\_\_\_\_    Antlerless \_\_\_\_\_
3. Do you hunt deer in the following seasons?
- |              | Yes                      | No                       |                  | Yes                      | No                       |
|--------------|--------------------------|--------------------------|------------------|--------------------------|--------------------------|
| Archery      | <input type="checkbox"/> | <input type="checkbox"/> | Regular firearms | <input type="checkbox"/> | <input type="checkbox"/> |
| Muzzleloader | <input type="checkbox"/> | <input type="checkbox"/> | Antlerless       | <input type="checkbox"/> | <input type="checkbox"/> |
4. What make, model and caliber firearm(s) do you use for deer?\_\_\_\_\_
- 
5. What make and power of scope(s), if any, do you use for big game?\_\_\_\_
- 
6. Do you *always* send in a Big Game Harvest Report Card after taking a deer, bear or turkey?    Yes ☐    No ☐
7. Do you annually apply for an antlerless deer license?    Yes ☐    No ☐
8. Who processes big game animals taken by you?  
Yourself ☐    A friend ☐    A commercial butcher ☐
9. Are you in favor of requiring every county treasurer to hold a public drawing to select antlerless license recipients?    Yes ☐    No ☐
10. Did you calculate any county's antlerless deer license allocation using the information and procedures presented in the November GAME NEWS?  
Yes ☐    No ☐
11. How many rifles \_\_\_\_\_, shotguns \_\_\_\_\_, handguns \_\_\_\_\_ does your household have? (No answer required if you are reluctant to give this information. However, no one except the GAME NEWS staff will have access to this information. Only averages will be reported.)
12. How many persons in your household shoot?  
Hunting \_\_\_\_\_    Plinking \_\_\_\_\_    Trap \_\_\_\_\_  
Skeet \_\_\_\_\_    Target: (Rifle) \_\_\_\_\_    (Handgun) \_\_\_\_\_
13. Do you believe a U.S. citizen has the right to use a firearm to defend himself, his family, and/or his property against criminal action?    Yes ☐    No ☐



# FIELD NOTES



## Close Call

**SNYDER COUNTY**—Early one morning before archery season a local hunter, completely camouflaged except for his face, had just got settled in his tree stand when suddenly, without warning, he was almost knocked out of his stand. A great horned owl, apparently mistaking the hunter's face for an early morning meal, tried to pick him up and take him away. The archer had talon marks on the side of his face and neck to prove it.—DGP John Roller, Beavertown.



## Slow Learner

**LEBANON COUNTY**—It sometimes saves a lot of pain and expense to familiarize yourself with your equipment before trying to use it in the field. Last muzzleloader season, a fellow stabbed himself with a ramrod as it broke while he was trying to load his rifle. After returning from the hospital he borrowed a ramrod and proceeded to break that one, too. Fortunately, he didn't injure himself the second time, but he was done for the day—nobody would lend him a third ramrod.—DGP Gary W. Smith, Lebanon.

## Who Lost?

**UNION COUNTY**—In an effort to demonstrate to sportsmen and others what the Game Commission is doing to manage wildlife and provide outdoor recreational opportunities, plans were made to conduct a Sunday afternoon tour of SGL 75 at English Center at the height of the fall foliage. After nearly a month of preparation, arrangements were made that involved five open-bed trucks to provide a hayride-like effect, a display, four district game protectors, a land manager, a land management supervisor and a regional director. I'm sad to report only about 60 people took advantage of the opportunity, and it's therefore unlikely that there will be another such tour for some time to come.—DGP Bernie Schmader, Millmont.

## Taking The Time

I recently started taking walks on SGL 227 which borders the south and west sides of the village where I live. While walking a railroad that borders the Little Schuylkill River, I observed what looked like a bright red carpet in an adjacent hollow. Upon investigation I discovered a thick bed of cardinal flowers. They are aptly named because of their bright red color and resemblance to a bird in flight. On a later day, while trying to photograph these flowers, a hummingbird kept scolding me for interfering with the nectar supply he was obtaining from the bright blossoms. This, among other observations, made me realize how much I have missed over the past 19 years because my work has kept me tied to a vehicle.—LM Stephen L. Opet, Tamaqua.





## High Tech

**LUZERNE COUNTY**—While visiting one of our Safety Zone Cooperators, I was puzzled to see a vacuum sweeper in his potato field. When I asked him why he had a sweeper in his field, he told me that he uses it to sweep Colorado potato beetles from his plants. He says the sweeper is more efficient than chemical pesticides.—DGP Edward R. Gdosky, Dallas.

## Worth Seeing

**CRAWFORD COUNTY**—The Third Annual Pymatuning Waterfowl Expo was held in Linesville last September. Attendance was up and the cool fall weather enhanced the festive atmosphere. This is the largest waterfowl display in the commonwealth, and is a waterfowler's dream to see.—DGP Dave Myers, Linesville.

## Enticing

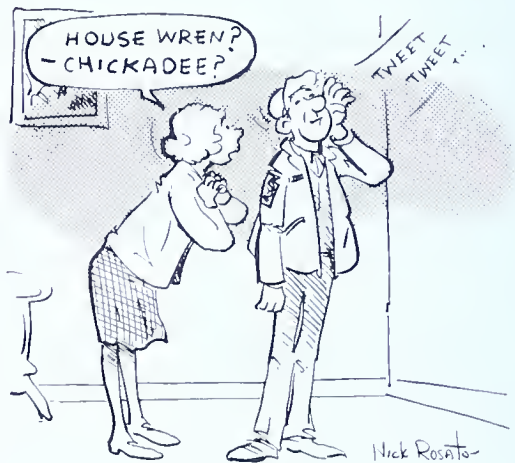
**CENTRE COUNTY**—A year ago, I entered a Field Note about a wayward pheasant that was captured in Schaeffer's Hardware Store in Bellefonte. You'll remember the pheasant obligingly flew into a box held by one of the employees. Last month the same employee encountered a ruffed grouse in their downtown parking lot and, you guessed it, it flew into their box for delivery back to the wild. Mr. Schaeffer says he is considering applying for a patent on his "Game Getter Boxes."—DGP Jack Weaver, Bellefonte.

## Line Litter

**WAYNE COUNTY**—Deputy Elwood Drake recently investigated a report about a goose acting strangely at Elk Lake. When he arrived Elwood found the bird sitting in an abnormal position along the shore of the lake. After capturing the bird, he discovered several feet of fishing line tangled around the bird's body and more down its throat. After all the line was removed, the goose was able to fly off and join other migrating birds. Please remember that litter is more than just an eyesore, its effect on wildlife can be devastating.—DGP Donald R. Schauer, Honesdale.

## The Agency's Backbone

**WESTMORELAND COUNTY**—Chances are that when you encounter a wildlife officer in the field, it will be a deputy game protector. In most cases you'll meet a well-trained person, dedicated to spending a great deal of time and resources advancing the cause of wildlife conservation.—DGP Rick Hixson, Ligonier.



## All Fixed

**MERCER COUNTY**—Deputy McKinley received a call about a bird being trapped in an attic, and crying as it tried to find a way out. After checking out the bird's calls, and listening for several minutes, Mac identified the birds—a smoke detector in need of new batteries.—DGP Jim Donatelli, Mercer.

## Elementary, Watson

**SOMERSET COUNTY**—I have been participating in our furbearer surveys for several years and have seen many signs of men and wildlife in the 36-inch circles of finely sifted dirt we make to check for visitors to the sites. One puzzled me this year as the circle was filled with bird tracks and small holes. I recognized that the tracks had been made by crows, but the holes remained a mystery until I looked closely and found many small ants in the dried creek silt I had used to sift in the circles. With their keen eyesight, the crows saw the ants and discovered a perfect feeding area. They were poking their beaks in to get the ants, leaving many small round holes.—DGP Daniel W. Jenkins, Somerset.

## It Can't Last

**CAMERON COUNTY**—The cost of a typical autoloading shotgun was \$154 in 1967. That same sporting arm is retailing for over \$500 today. The cost of a Pennsylvania adult resident hunting license, however, has gone from \$5 to \$8 during the same time period. If we compare the two, it appears that the Game Commission is providing one of the best bargains going, while doing an excellent job of coping with inflation and stewarding the monies entrusted to us by the sportsmen.—DGP Joe Carlos, Driftwood.

## You Bet

**MCKEAN COUNTY**—While writing citations on two men caught in the act of spotlighting deer at 3 a.m. with a loaded rifle in the car, one defendant repeatedly stated that they were not going to shoot a deer. When I finished writing I asked him, "What would you think if you were the game warden and you caught me out here at 3 in the morning spotlighting deer with a loaded rifle in my possession?" His answer was short and to the point. "Guilty," he said.—DGP John Dzemyan, Smethport.

## SPORT Works

**CLEARFIELD COUNTY**—As an example of how well the SPORT Program can work, Game Protector Weaver and I turned a single telephone call, which included a piece of good information, into a \$3,500 deer case. So please get involved. Do your part to help your sport, turn in a wildlife thief.—DGP Don Zimmerman, Morrisdale.



## No Escape

**ALLEGHENY COUNTY**—A friend of mine, who has been plagued with wildlife nuisance problems here, recently traveled to the northcentral part of the state to relax and do a little fishing. Late one afternoon he returned to his vehicle only to find a porcupine underneath it, chewing on the wires and hoses. After chasing the porcupine away, he raised the hood to check on the damage and out came a groundhog that ran up the windshield, over the roof, and down off the trunk. My friend may have gotten away from some of the big city problems, but not all of them.—DGP D. E. Hockenberry, Pittsburgh.

## Marching On

As I traveled through some good small game habitat between Ligonier and Carlisle one Saturday afternoon, I failed to see a ringneck or a rabbit but I did see 22 deer. Time sure changes things.—IES John Badger, Ligonier.

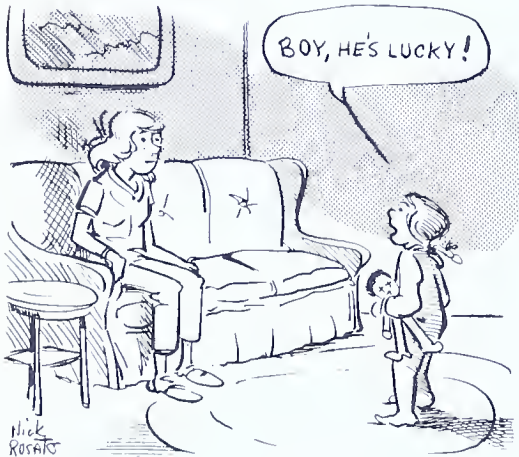


## Sharp Eyes

**BUTLER COUNTY**—While patrolling recently, I noticed about 30 turkey vultures feeding in a field. Closer inspection revealed a number of dead field mice in the field. Apparently, a recent cutting of hay killed the mice. But what is most amazing to me is the fact that these birds were able to locate those small mice in the field.—DGP Larry Heade, Butler.

## Logical

Last fall all salaried game protectors attended a two-day law enforcement conference at the Ross Leffler School of Conservation—which we normally refer to as “the training school.” When I returned home my 2½-year-old son Matthew asked where I had been. After I told him I was at the training school, he asked, “Did you see any trains?”—LM Stephen Schweitzer, New Enterprise.



## So There!

**PERRY COUNTY**—While my daughter was babysitting for the neighbor's 4-year-old, the little girl asked, “What does your daddy do?” Theresa went into a long description of the duties of a game protector. When she finished, the little girl gave her a wide-eyed stare and replied, “Well, my daddy works!”—DGP LeRoy Everett, Newport.

## Their Finances Will

**BEDFORD COUNTY**—My neighboring officer, Tim Flanigan, wrote a very moving newspaper article about poaching deer. He went into great length about these people being thieves to the sportsmen and safety hazards to the public. As it happened, I was collecting a fine from a poacher the day this article appeared. As he paid his fine, he told me that he and his pals thought it was amusing that he had to pay on the very day this article appeared. I guess some persons' attitudes will never change.—DGP David Koppenhaver, Everett.

## Two With Mustard?

**ADAMS COUNTY**—Deputy Brodbeck and I were at East Berlin's Colonial Day, manning the Southcentral Region's mobile display trailer. Late in the day a woman and a bedraggled youngster approached the display. They stopped approximately 15 feet in front of us and the woman stated, “See! I told you they weren't selling hotdogs.” Now, I've been mistakenly associated with many different occupations while in uniform, but a hotdog vender?—DGP Gary Becker, Aspers.

## Repeaters

**INDIANA COUNTY**—A trio of would-be deer poachers was apprehended recently within seconds of their unsuccessful attempt to kill a deer on a lonely mountaintop road. After Deputy Sam LaRosa and I finished the paperwork and issued citations to the three, I noted that one of the individuals was a repeat offender who was still paying off his fine. One of the others, when asked if he had anything to add, remarked “I'll never come up here again.” The fact is, though, that despite a \$200 fine, court costs, and a three-year loss of hunting privileges, the odds are I, or some other officer, will have to deal with these fellows again.—DGP Mel Schake, Indiana.



## Just Relax

**MONTGOMERY COUNTY**—As part of continuing training program, all Southeast Region personnel attended a water rescue class. One of the most important things I learned was that a heavily clothed person will float quite well. In fact, the more clothes you have on the better off you will be, as they will serve as floatation devices so long as you remain on your back with the air trapped inside. If you try to tread water or swim you will force the air out and sink within minutes. If you fall into deep water with bulky clothes on, remain on your back and keep your arms in the water as you paddle to shore with your hands.—DGP William Wasserman, Montgomeryville.

## How It Goes

**BLAIR COUNTY**—At 3 o'clock one recent morning we were heading home after several hours of night patrol when Deputy Dale Stehley radioed that he was stopping to pick up a roadkill. When I asked if the driver was there, Dale assured me that he was. It was Dale's car the deer had hit. It still seems ironic that we spent hours trying to protect deer from poachers only to have one die running into and damaging a volunteer's vehicle.—DGP Larry Harshaw, Hollidaysburg.

## Count Off

**MONTOUR & NORTHERN NORTHUMBERLAND COUNTIES**—During a four-week period in early fall, I kept records of all the animals I observed while on night patrol. And while some of the animals may have been counted more than once, if they were seen on different nights, I think the results provide some food for thought: Totals observed were: 43 domestic cats, 24 opossums, 18 raccoons, 12 skunks, 10 rabbits, 9 fox, 7 domestic dogs, 1 weasel, 1 porcupine, 1 bear and over 300 deer—47 of which were antlered bucks.—DGP Daniel I. Clark, Potts Grove.



## Stuck

**CENTRE COUNTY**—An area farmer recently reported to us that he had an unusual bear problem. Occasionally this farmer gets more milk on hand than he can store in his milkhouse, so he puts the surplus in cans and takes it to his spring at the base of the mountain where he can keep the milk cold. One morning he found that a bear had been there the night before. Several cans had been knocked over and emptied, and the place was a real mess. When he started putting the lids back on the cans, he found that he was missing one. The area was all torn up, indicating the bear had shoved his head inside the milk can and got the thing stuck on his head. A thorough search of the area failed to turn up either the can or the bear.—DGP George Mock, Coburn.

## College Counters

I recently had the pleasure of accompanying Biologist Fred Hartman and some students from Indiana College on a goose survey. The students and their advisor, in conjunction with the Game Commission, will be monitoring geese in the Pymatuning area. They will be checking neck band numbers, numbers of geese, etc. The information they accumulate, along with information from other agencies, will help us plot the movement patterns of Canada geese throughout the eastern United States.—LM Keith Harbaugh, Meadville.

# Recent Promotions



William L. Hutson



James C. Hyde



E. L. Camp, Jr.



Barry L. Warner

**J**AMES C. HYDE, E.L. Camp Jr., Barry L. Warner, and William L. Hutson recently received promotions which moved them out of the field and into headquarters assignments. Hyde, Camp and Warner are now in the Game Commission's Harrisburg Office, while Hutson is in the Northeastral Regional Office near Jersey Shore.

Hyde, who is now Chief of Game Land Planning and Development, had been Land Management Supervisor in

the Southeastral Division Office, Huntingdon. Camp, who was a district game protector in Perry County, is now Chief of Support Services in the Bureau of Law Enforcement. Warner had been a district game protector in Juniata County; he is now Chief of Special Operations in the Bureau of Law Enforcement. Hutson was a district game protector in Jefferson County. He now is Pittman-Robertson Area Leader in the Northeastral Region.

## Du Pont Donates Land to Pennsylvania and Delaware

In a reereation of an historie ceremony along the banks of White Clay Creek near Newark, Delaware, the Du Pont Company gave 1,700 acres of land

valued at \$8.5 million to the states of Delaware and Pennsylvania. The property will become a wilderness park, the White Clay Creek Preserve.

The property, which is rich in American history, provides a seenic habitat for 40 species of trees, and 20 mammal and 185 bird species, some of which are rare or endangered.

In addition to paper deeds, a Du Pont representative presented both states with a twig, soil and water in keeping with a medieval legal procedure called "livery of seisin." The procedure involved passing between the parties symbols of the land as was done in 1682 when William Penn acquired the property from the Duke of York.





## Books in Brief . . .

(Order from publisher, not from Game Commission)

**A Guide to the Birds of Lancaster County, Pennsylvania**, Lancaster County Bird Club, 1400 Quarry Lane, Lancaster, PA 17603, 208 pp., softbound, \$11.50, delivered.

This is an up-to-date and comprehensive guide to the birds of Lancaster County and where they can be found. Over half the book is devoted to the county's birding hotspots. Specific areas detailed include the Middle Creek Wildlife Management Area, Muddy Run—a 2500-acre hydroelectric recreation facility owned and operated by Philadelphia Electric Company—the Amish Farmland, the Susquehanna River and more. References to Dr. Herbert Beck's "A Chapter on the Ornithology of Lancaster County," written in 1924, shows the changes that have occurred in the county's avifauna over the past 60 years. Concluding the guide is an annotated checklist of the 325 species of birds known to exist at one time or another in the county. This top-quality field guide has set a new standard for local bird club publications. County residents and visitors will both find this book useful and interesting, and so will bird enthusiasts around the state. Proceeds from sales will be used for conservation projects in the county.

**Maps and Compasses: A User's Handbook**, by Percy W. Blandford, TAB Books, Inc., Blue Ridge Summit, PA 17214, 252 pp., \$15.95, hardbound, \$9.25, softbound. A wide variety of maps is available to travelers of all sorts, but many people aren't aware of them and others don't know how to use them. This book thoroughly explains how to use and get the most from a map, whether it's a state highway map, a topo sheet, or an oceanic navigation chart. Of course, using a map also most often means using a compass, and that is thoroughly covered here, too. Whether backpacking through a wilderness area or exploring a new lake, this book shows how to find your way and get the most from your trip.

## Camp Essay

I learned that Nature is one of the most important of the other incarnations. Without Nature the function of Death, Good, Evil, Fate, Time, War would not continue. The world around us composes all these incarnations, but the most dominant material one is Nature. Thought, Thumbs, and Kissing distinguish us from other animals. We have already used our thumbs to build, build, build, now we must use our thought to help retard or prevent the growth our thumbs and kissing have reaped for us.

The Earth may look like a speck of sand in the beach of the universe, but it is probably the only habital place as far as we know. We must guide this globe to resurrection and not destruction. We only have a short time to do it in and our children might forget our plights and fights and through ignorance and mismanagement turn the pleasure we know into a dump.

I have gained knowledge more precious than any material possession. This gives me joy, because knowledge is my most precious possession.—Bryan Gonzalez

Youngsters attending the Monroe County Conservation Camp in August were asked to write an essay related to their time there. We thought the piece above, submitted by Bryan Gonzalez, 15, of RD5, Stroudsburg, deserved wider recognition, so are printing it here for GAME NEWS readers.

**This publication  
is available  
in microform  
from University  
Microfilms  
International.**



Call toll-free 800-521-3044. In Michigan, Alaska and Hawaii call collect 313-761-4700. Or mail inquiry to: University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.



# Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Douth, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00
<b>Working Together for Wildlife Collectibles</b>		
_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER PATCH .....	\$ 3.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1985 ART PRINT "Big Woods Bobcat" .....	\$125.00
_____	1984 ART PRINT "Dutch Country Bluebirds" .....	\$125.00
_____	1983 ART PRINT "River Otters" .....	\$125.00
<b>Wildlife Management Areas</b>		
_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00
<b>Pennsylvania Bird and Mammal Charts</b>		
_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 charts) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00
<b>SPORT Items</b>		
_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00
<b>GAME NEWS</b>		
_____	1 Year Subscription .....	\$ 6.00
_____	3 Year Subscription .....	\$ 16.50
_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 3.50
<b>Waterfowl Management Stamps (Voluntary)</b>		
_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



# Darius—the Great Persian Conservationist

By Robert M. Alison

**D**ARIUS I (522–486 BC) was the great Persian king and empire-builder who found time and energy to codify Persian law for the first time. But, more than that, he was an avid sportsman. Hunting was his passion. His enthusiasm for the hunt was such a driving force that it influenced him greatly when he addressed affairs of state.

Thus when Darius set about organizing the great bulk of existing Persian custom into a legal code, he saw to it that laws relating to hunting received high priority. His motives in doing so are not quite clear. It seems they stemmed not so much from a conserva-

tionist philosophy as from religious considerations.

The Persian god Ahura-mazda was believed to have a special interest in wildlife. To please that deity, it was necessary to take extraordinary protectionist steps. The result was a series of conservation measures that were distinctly ahead of their time, unique steps that stand out starkly in the light of history.

Even more significant, they were strictly observed for over 2000 years. In AD 1495, most were reconfirmed and incorporated into the laws of Iran, whose frontiers encompass the core of the old Persian Empire.



One of the oldest conservation laws relate to the kar fish which was protected at all times. Other early laws protected the zobara-vahman, a sparrow, and the sok, a magpie. Violation was extremely serious. The normal penalties included flogging, mutilation, and even dismemberment.

Darius's code protected crows, white falcons, vultures (because they ate carrion), wild oxen, mountain goats, deer, wild asses, and any wild animals that destroyed snakes. Foxes were protected, because they wailed at demons. And the ichneumon was valued and protected because it hunted down the venomous garzak snake.

### Hedgehogs Protected

Ants plagued the ancient Persians. As hedgehogs destroyed ants, they earned a special place. Hunting hedgehogs was a capital offense. Even hedgehog burrows were protected; to plough one under was a grave crime.

Beavers were special, too. They were thought to battle the dreaded water demon. Therefore, they were held to be desirable, and for that reason, they were protected.

One version of Darius's code specified that among the most serious crimes in Persia was that of killing hares, bats, magpies, kites, eagles or swallows. Punishment was appropriate to the offense.

Not only were some animals protected, but so was their habitat. According to Persian law, it was forbidden to deliberately destroy or cut down cer-

tain plants. It was a sin to unlawfully kill trees or shrubs.

Though wild ducks and geese were also protected, their wetland haunts apparently were not.

Apart from those measures that appear mainly religiously inspired, a few others seem to have been rooted in a bona fide conservation conscience. One related to game bags. The concept of specific daily limits did not exist back then, but Darius cautioned the Persians against overhunting game. He suggested that "it is greatly necessary to refrain from much slaughter." Anyone who killed too many animals was believed subject to the harshest punishment in the afterlife. It was thought that the souls of all who overkilled would be eternally punctured by hundreds of thousands of needle-sharp sabers, the transformed hairs of the pelts of their ill-taken victims.

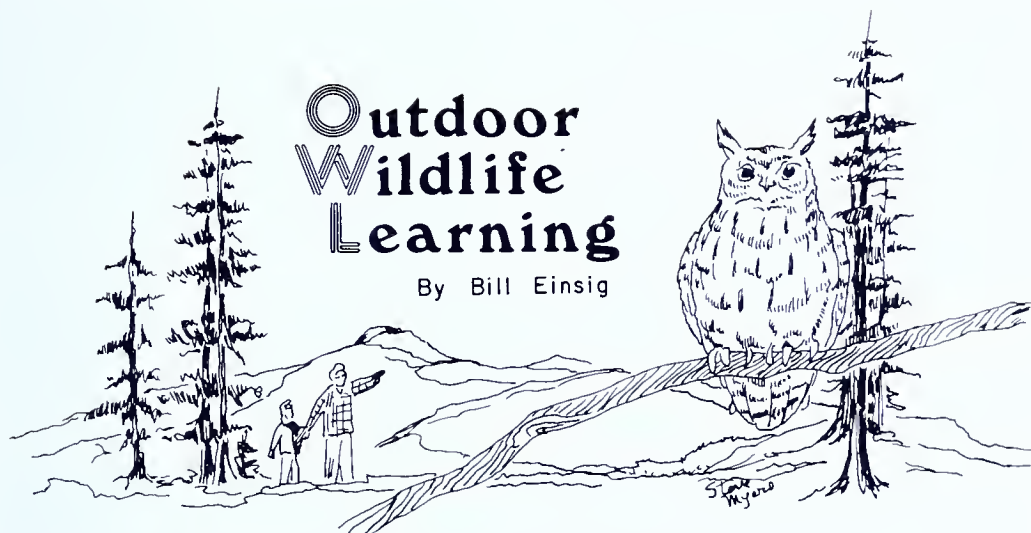
To Darius, hunting was a glorious pastime, a gift from the gods. He felt all should enjoy it. Before his time, hunting had been strictly an aristocratic monopoly. He put in place a law that changed all that. It opened the door to hunting to everyone "whose wealth is less than 300 stirrs."

Darius took his hunting seriously, and he seems to have viewed conservation the same way. Not only did he put into force a number of appropriate laws, but he also constructed several sprawling wildlife preserves, where hunting was forbidden.

His conservation measures were outstanding. They supported a fledgling concept which had already sprouted in that society of energetic sportsmen, one that he promoted and stimulated and expanded upon more than any other ruler of his time.

Throughout history, the most energetic conservationists have also been the most ardent sportsmen-kings, those whose lofty positions have placed them in roles where they might do wonderful things to guard against the exploitation of wildlife. Many would follow this course over the centuries, but Darius was among the first.





## Some Questions About Rabies . . .

### What causes rabies?

Rabies is caused by a virus, *Formido in-exorabilis*. It is a neurotropic virus, which means it attacks and moves through nerve cells to the spinal cord and brain of the infected animal.

### Does the virus invade other parts of the body?

While nervous tissue is thought to be the site of most rabies activity, the virus has been found in other body tissue such as kidney and testicle, and blood. Of course, the saliva of an infected animal contains large numbers of viruses and is the medium most responsible for transmitting the disease.

### Exactly how is the disease transmitted?

Infection usually occurs through the bite of a rabid animal. However, rabies virus in saliva can enter through any open wound whether or not an actual bite occurs.

Some authorities also believe the virus can enter through unbroken mucous membranes of the nose and mouth. This possibility has led authorities to recommend thorough washing of hands licked by unfamiliar animals even if the animals appear healthy.

### Do you mean an animal could be infected but appear healthy?

Yes. The virus goes through a variable incubation period when it is transmitted to a new host. During this time, it multiplies

and moves through the nervous tissue to the central nervous system. In dogs, this incubation period is generally two to three weeks long, but could be significantly longer.

The first symptoms in dogs are often periods of excitability or nervousness. During this time, the dogs appear healthy but may bite quickly and for little reason. They may later become partly paralyzed and sluggish, with large amounts of saliva drooling from the mouth. Death generally occurs three to five days after the first symptoms show. However, the dog could have been infectious for a much longer period of time.

### Are symptoms always the same?

Not necessarily. There are three classic kinds of rabies. Furious rabies is marked by extreme irritability and aggressiveness. Paralytic rabies results in partial or extensive paralysis, while dumb rabies is marked by paralysis and sluggish behavior. Often the symptoms are a combination of the three types.

### What are the symptoms in man?

Symptoms in man are similar to those in animals. There is a period of depression, some fever and restlessness. Periods of extreme excitement follow. In man, the throat muscles experience painful spasms upon swallowing. Since swallowing can be a reflex response to seeing water, patients develop a powerful aversion to it—hence, the term “hydrophobia.” Dogs experience

similar painful contractions of throat muscles but do not associate the spasm with water.

### **What other animals get rabies?**

Rabies infects warm-blooded animals; that is, mammals and birds. Cases of bird rabies are less common than mammal cases but they do occur. Most cases of bird rabies involve raptors.

Dogs, cats and cattle lead the list of domestic animals diagnosed as having rabies. However, pigs, sheep, horses, goats and ponies have also been infected.

Among Pennsylvania wildlife, foxes, bats and skunks lead the list of rabies victims. Cases of rabies have also been confirmed in raccoons, deer, groundhogs, squirrels, muskrats, and opossums. Back in 1944, there was even a rabid zebra.

Pennsylvania has recorded only one rabid rat and that was thirty years ago. However, a rabid rat was confirmed in Maryland this year, as was a Nebraska field mouse. Apparently, most, if not all, warm-blooded animals are susceptible to the disease, but certain species are much more apt to be exposed to it as a result of their own behavior patterns.

An interesting characteristic of the current rabies outbreak is the high percentage of infected raccoons in the sample of animals tested. From 1943, when the Pennsylvania Department of Agriculture began keeping such records, through 1981, 13 raccoons were confirmed to have had rabies. In 1982, 26 of 74 confirmed rabies cases were raccoons. In 1983, 82 raccoons were confirmed as rabid compared to 35 foxes, 28 bats and 10 cats, among others.

### **Just how serious is this recent outbreak?**

Rabies outbreaks occur over 3–7 year periods. For nearly thirty years, the peak outbreaks never exceeded 100 confirmed cases per year. But in 1982, the number of rabies cases shot to 74, and 1983 topped out at 170 cases, the greatest number since 1952. When this column was written in

October, 1984, there were already 278 cases of rabies for that year.

So this is a significant outbreak. It is a time to understand the disease and to be more cautious in certain specific ways. It is not, however, a time to overreact.

### **What precautions should be taken?**

Several commonsense rules should be understood by every person living close to domestic or wild animals.

1. Be sure your pet is vaccinated for rabies. Do this for the sake of your pet and your family.

2. Be wary of wild animals that appear unafraid of you or seem sluggish, dazed or lame. It is never a good idea to try to touch, pet or hand-feed any wild animal, whether there is a rabies outbreak or not.

3. Be wary of unfamiliar domestic animals. If licked by a dog or cat, wash the site thoroughly with large amounts of soap and water. In fact, a small brush would help to physically remove the virus if it is, in fact, present.

4. If you are bitten, make every attempt to restrain the animal. Dogs usually begin to show symptoms within three weeks. If the animal dies, or is killed, its brain cells can be examined for Negri bodies. These small structures are telltale signs of rabies infection. In either case, it is extremely important to determine whether or not the animal was rabid because once symptoms show in man or animal, death is the nearly inevitable result.

### **If I suspect a dead or dying animal as being rabid should I have it tested?**

Not really. If a human has not been exposed to the animal, it would be best to simply bury the carcass four feet deep, avoiding direct contact with it. The tests are time-consuming and little is actually gained by knowing if a particular animal is rabid or not. However, if a human was exposed to it in some way, such tests could be absolutely necessary. A medical doctor should be consulted immediately.

---

## **Water Is Vital**

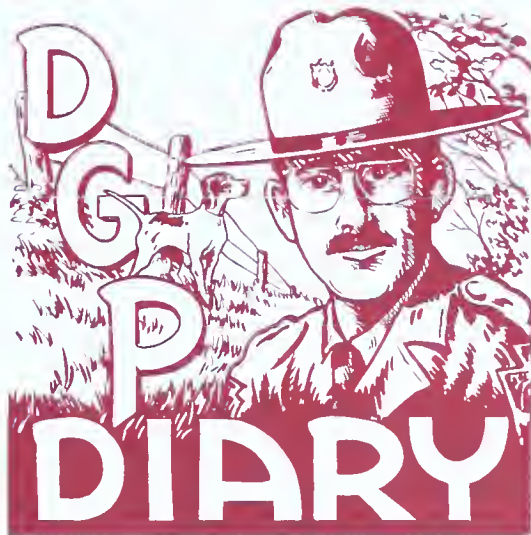
Factories need enormous amounts of water to produce some goods. For instance, it takes 60,000 gallons of water to make a ton of steel.

**I**N PREPARING to take over the DGP column, I find I am the eighth officer to have this privilege. It began in 1978 when Jack Weaver was assigned to the rugged northcentral county of Tioga. Jack has since transferred to Centre County, where I had the opportunity to serve under him as a game protector trainee during the fall of 1981. DGP Diary has also gone full circle and returned this year to the Northcentral Region's most mountainous area, Cameron County.

This county is rural, with less than 7000 residents. It is almost 98 percent forested, about half being owned by the Bureau of Forestry and the Game Commission. Finding areas to hunt is no problem. As you look at Cameron County on the map, it doesn't appear large (401 square miles), but if you were to flatten out all the mountains it would be one of the biggest counties in the state. Perhaps that's why it's often referred to as "mountain country." With its big woods and clean streams, it almost seems an area that time has forgotten, a place where the pace of life isn't so hectic, and people still drive 45 in a 55 mph zone. Everyone perhaps except the game protector in January . . .

After three or four months of teaching hunter education, stocking pheasants, and constant law enforcement patrolling, January finds most of us exhausted and wanting nothing more than to catch up on lost sleep and spend some time with our families. Court dockets and those few individuals who just refuse to respect seasons or bag limits keep us on our toes, however.

*January 2*—New Year's holiday, which is supposed to be a day off with pay, turns out to be a day when Deputy John Schatz and I earn our pay. On my way home from salting and storing deer hides, I pass a pickup with two passengers near my headquarters. About 45 minutes later I receive a phone call from a man who just witnessed two individuals shoot at a flock of turkeys from a pickup truck matching the description of the one I saw earlier. Schatz



**By Joe Carlos**

**District Game Protector  
Cameron County**

and I take off.

Near the scene we stop a truck whose behavior appears suspicious and matches the description. The occupants are dressed exactly as the informant described and they have a virtual arsenal—two shotguns and two 222 rifles which we later determine have been recently fired. We identify ourselves, state the reason for our stop, and read the occupants their rights. They say they were target shooting earlier when I saw them near my residence, but that they hadn't shot at the turkeys. We ask them how many rounds they shot, and each produces the appropriate number of freshly fired cases. Searching the vehicle, Deputy Schatz discovers an additional freshly fired case which they are unable to explain. They are also unable to produce a target, claiming they used it to light a fire. Citations are issued for shooting from the road and attempting to kill a turkey in close season. As the defendants leave, John and I make notes of the tread design and sizes of their footprints in the fresh snow, as this might later become an important element in our prosecution.

We continue our investigation, scouring the area the turkeys were in. We find lots of fresh turkey tracks but no sign of other animals such as squirrel or



## KILLING EAGLES IS UNLAWFUL!

Mature Bald Eagle



Immature Bald Eagle



Up To  
**\$4,000 REWARD**

for information

leading to the CONVICTION of individuals who MOLEST,  
INJURE, or KILL BALD or GOLDEN EAGLES.

Report violations to your LOCAL GAME PROTECTOR.

rabbits which would have been in season. We are just leaving when John slips and catches himself against a tree and discovers the additional piece of evidence we are looking for—the bullet impact point. There is a fresh bullet wound on the side of a tree near a turkey track. It is a mixed blessing, though, as it is a grazing hit and the bullet evidently blew up on impact. We are unable to recover it for ballistics comparison.

We proceed to interview residents of the area. One of them, upon hearing the shot, went to her window and saw the defendants' vehicle and no other traffic in the area. She is even able to positively identify one of the defendants, but admits she did not see them shoot. John and I return to the area where the defendants claimed to have been target shooting and find no evidence in the fresh snow of such activity.

*January 3*—I am scheduled to be on annual leave but continue the investigation on my own time. At a pull-off a short distance from where the shot was

fired I find two sets of footprints exactly matching the size and tread of the defendants'. I follow the tracks down over the bank and up the railroad to a point right across the Driftwood Branch from where the turkeys had been. I conclude they had been following up their shot. When they were unable to cross the creek, they returned to their vehicle. I'm timing my trip and it fits perfectly into the defendants' time frame.

*January 4*—I'm still on leave but continue the investigation by taking photos of the bullet impact. I also comb the woods on both sides of the road for human footprints. There are none, which should help us prove that the shot was fired from the road.

*January 11*—This is our day in court. The witness is subpoenaed and testifies, as do Deputy Schatz and myself. The original eyewitness informant does not wish to become further involved, and we always respect an informant's confidentiality even if it jeopardizes a case such as this one. Without eyewitness testimony or solid evidence such as a bullet, our case is entirely circumstantial, and District Attorney Russell D'Aiello advises that our chances of a conviction are not good. The defendants are found innocent and John and I both shake hands with them and apologize for the inconvenience. Sometimes it is hard to remain objective, but no officer can allow himself to become personally involved in a case. Our role is to investigate and prosecute, not be judge and jury.

*January 17*—Today is a welcome change of pace as McKean County DGPs Dzemyan and Rankin join me in attempting to locate elk for the upcoming survey. John Dzemyan, a classmate of mine at the Training School, was on the Commission's Food & Cover Corps here in Cameron County prior to entry into the school, so he actually knows some areas of my district better than I do. He is informally put in charge and gives

Jim and me a good workout looking for elk or their sign as we cover many miles on foot. It is a good mental relaxant and we all see elk. The day ends on a sour note, however, when John discovers a spike bull which had been shot and left some time during deer season. This happens almost every year, and the previous season we made a successful prosecution, but this kill is just too old and there are no clues.

*January 24*—This is the main day of the elk survey and I am spending it with Jack Payne, a wildlife professor who has just taken a position at Penn State. Jack recently moved here from Utah, and since I had spent a year at White Sands Missile Range in New Mexico, we found we had a lot in common. As I have been out of college for some time, it is a good

opportunity to pick Jack's brain for recent developments in our field.

The elk survey is one of the few examples of an attempt to physically count each and every member of a wildlife population. With most species we use sampling techniques, such as the marked recapture method well known in bear research. Since there are only a few elk (119 counted in 1984) and they inhabit a rather limited area of Elk and Cameron counties, we and the Bureau of Forestry utilize our personnel and volunteers to comb the area on foot while a helicopter surveys everything from the air.

*January 27*—Today is spent on inservice training. Food & Cover Foreman Jim Rusnak, a certified Red Cross instructor, is teaching us first aid.

## The Little School That Could

By Fredrick G. Weigelt

DGP, Wayne County

Hard by the Delaware River in east-central Wayne County lies the village of Damascus. Grandma Moses-like, it is comprised mainly of frame houses, small churches, a few country businesses, a rural post office, and the little school that could, Damascus Elementary. Started in 1829 as The Free Academy, it has remained small in stature—the second smallest high school in the state before its incorporation into a school district in 1975—but big in progress.

When, in 1959, the Game Commission started hunter education as a volunteer program primarily for young hunters, Damascus Elementary was approached and readily accepted this new program. After two successful years, Principal Glenn Good and the schoolboard decided to expand the course.

Four teachers were certified as instructors: Principal Glenn Good, Vo-Ag teacher LaRue Elmore (retired), science teacher Ralph Lewis (deceased), and Carl Bell, who is still the phys-ed teacher and still instructing hunter education. The course was mandatory for all students who had not been previously certified.

Each class is covered in one-quarter of the school year, averaging about twelve hours. Whereas original classes stressed firearms safety entirely, hunter ethics, public awareness, and respect for wildlife are now given much consideration with the inclusion of the SPORT program. The elementary school averages only about forty-five students per grade but, in this case, small is good. It is believed to be the first school in Pennsylvania to incorporate hunter education in its school program.

## Efficient In Dark

The great horned owl, though it weighs only three pounds, has eyes as large as a human's and can sight objects with about five percent of the intensity of light a human requires.

**L**AST NIGHT, three inches of powder fell, giving us six above the crust. If I want to find any tracks, I'll have to do it now before the wind starts erasing.

Prints the size of half-dollars cut across the township road and enter our woods. Soft-edged and partly snowed-in, they would have been made early this morning. They go in a straight line. I'm thinking deer—last year's fawn, probably separated from its mother by last month's hunting season—until the tracks march up to a low tangle of mountain laurel and, instead of skirting it, enter. Fox. The tracks squeeze under the bowed stems, bend here, bunch there, leave the thicket, leave the woods, cross into the cutover land.

I turn and walk the border between woods and slashings. From above, the huckleberry shrubs look like trees drifted deep. And so must they be to the mice whose tracks wander among them.

In the powder, the hind and fore legs on each side together leave one big print, wider at the front than at the back. Left- and righthand prints are separated by a thin, wobbly line—the tail. The mouse tracks wander about, from log to stump, from stump to sapling, from sapling back to log, their mission not immediately apparent. There are mouse tracks aplenty in the cuttings, markedly fewer just 50 feet away in the open woods. In one spot they radiate out and back from a central hole like the arms of a star. They duck under the snow, only to surface a yard away.

### Without Warmth

The sun has edged above the horizon, where it gleams brilliantly but without warmth. The rising breeze swirls motes of snow, glittering and then black, like flaked obsidian.

In one trunk of a double oak, a pileated woodpecker has chiseled down to the smooth, blackened chambers of carpenter ants. The excavation is old: no wood chips on the snow. In the other trunk, three hickory nuts lie wedged between ridges of bark. The hulls,

# Thornapples



*Chuck Fergus*

chipped open, have sifted full of snow. A small woodpecker—not a squirrel, because the openings definitely were not gnawed—must have needed a natural vise to hold the hard-shelled nuts for opening.

A shrew trail curves through the snow. The tracks resemble those of mice, but are smaller. Tail-marks show, and, behind each paw's print, a little curving line like the string of a balloon: the drag mark of the hind foot. Not a lame shrew—shrews just walk that way. The tracks disappear under the snow, becoming a meandering, humped-up line. A shrew makes this tunnel by swimming through the powder, and sometimes it travels a long way. One naturalist reported following a shrew tunnel for over a mile on the frozen Yukon River. In snow tunnels, and in the chill spaces beneath logs and branches, shrews encounter mice, and kill them.

Grouse, too, inhabit the pale, opaque layer just under the snow's surface. Often they let falling snow cover them at night. In powder snow, they shift and tread and work their way down in. If wounded by a hunter, a grouse will sometimes worm into the white blanket, trying to escape.

In my favorite grouse cover, I find a line of tracks. The line is less than two feet long, maybe a dozen tracks, with those behind and those in front melted away. The tracks, instead of being im-



prints, are raised. The grouse must have walked across the snow, compressing it; the snow melted around the compressed trail; and the tracks, frozen to ice, stood higher than the surrounding white. Catching the low winter sun, they glint like glass.

Pushing through the powder, the tips of the skis look like periscopes. The skis hiss, the poles *chock* into the old crust below. My wife leads as we follow her tracks of yesterday. Today the temperature is in the single digits, the sky bright blue; yesterday at dawn it was 17 below.

My wife stops. "Here's where I saw them." She points her pole at a patch of redbush. In the brush, on the logging road, and all over the logged-off hill, hundreds of dots mark the snow.

We slip down the road, snowplowing to check our speed. She stops and points again. Six deer creep toward the ridge, noses to the ground, tails depressed. The hill is a good spot to spend a winter day, for the slope faces the sun and the ridge bars the biting wind. The deer mill about, looking at us. We wait. A big doe takes three slow bounds and it is gone. The others follow, each skylined for a moment on the crest.

Tracks in snow can be hard to puzzle out. In deep snow, I sometimes have difficulty telling which way the animal was headed. I peer down to the bottom of the track, looking for a paw or hoof mark; if the print is caved-in with snow, I try to find a mark left by a foot coming up, forward, and out of the hole.



When I spot an animal, I wait for it to move off, and then go look at its tracks. If the creature sees or winds me and flees, the tracks will be far apart. I measured 20 boot lengths between two sets of deer prints the other day. The tracks penetrated to the crust, and I could easily make out the hooves, splayed by the weight of the animal landing. I've uncovered some amazing facts from the tracks of fleeing deer.

A deer can leap a long way without raising its body more than a few feet off the ground: I found two consecutive tracks 15 feet apart under a dense canopy of locust branches about three feet in the air.

Although rocketing along, a deer can turn on a dime: I discovered a trail that had one set of prints pointing west, the next set north, and in between, testifying to the abrupt change of direction, a few grains of snow kicked out of the west-facing spoor.

### Instructive

More instructive are the tracks of an animal that isn't aware of my presence. I watch the creature carefully and determine what it's up to. Then I follow and see what it really did. I note where it slowed, and why: Scent lingering in another animal's trail? A morsel of food? An obstacle? I look at the fresh tracks and try to remember their details—the edges crisp, the pad or hoof marks sharply defined, snow kicked up and out of the holes. Sometimes I leave and then come back in an hour, to see how the tracks have aged. Perhaps the edges are smoothed off. The ridges between the pads or hooves are melted or crusty, depending on temperature. The ejected snow has flattened slightly through melting, or the wind has begun to fill the tracks with snow. If I find a set of relatively fresh tracks; if I remember that the wind began to rise at nine in the morning; if the tracks have snow, or leaves, or pine needles blown into them—then I know the tracks were made before nine.

The snow started late in the night,



and this afternoon we have decided to find a fox. On our way to the woods we cross a broad stubblefield. Crows have been here, looking for corn; their tracks, pigeon-toed and wobbly, suggest a band of drunks. My wife points out a spot where one has taken off: the wing print is four shallow lines, like the tines of a leaf rake drawn through the snow. Wild turkeys have been gleaning, too. Their spare, angular tracks crisscross the field near the woods.

We enter the trees. When we find ourselves breaking noisily through the old crust, we get onto a snowmobile track: Here, all of the crunch has been packed out of the snow. Farther along, we put out a dozen deer. White tails twirling, they run toward the sinkhole where we intend to go. Despite the commotion, we decide not to change our approach. We move ahead carefully and quietly, into the freshening wind.

When we reach the sink, we intersect fresh tracks, running tracks, with snow kicked out behind. Then we spy him, a deep rusty red under the leaden sky.

He dashes uphill at the far end of the sink, circles around, and creeps along the opposite edge—he doesn't know where we are. He stops, turns and trots away, then comes back to the lip of the sink. Black fur peppers the red on his back and tail, and he has no white tail-tip that we can see. He trots off purposefully, holding his thick tail straight out behind. Soon he disappears among the flakes.

We backtrack a few feet to a little knoll, a yard-broad hummock that rises ten feet above the floor of the sink. Here the snow is packed smooth and melted in a depression the size of a throw pillow. Shallow furrows show where the fox placed his front claws. No tracks lead in to the bed. He'd been curled up snugly since dawn. The deer, of course, drove him out. Two sets of their tracks go by the hummock, one on either side.

My neighbor, Wayne, is a good tracker, but this one has him stumped. We snoop along beside the trail, simultaneously trying to keep out of each

---

## Tentative Season Dates for 1985

For the convenience of hunters who must plan far ahead, the Game Commission has established tentative opening dates for 1985 hunting seasons.

The archery deer season is tentatively scheduled to open October 5, and the early small game season is slated to get underway October 19. The regular small game season in 1985 is tentatively planned to start November 2, while the bear season is due to begin November 25.

Antlered deer season opens the Monday following Thanksgiving. In 1985, antlered deer hunting will start December 2.

other's way and not to kick snow in the prints, which are snowed in enough that neither of us will hazard a guess.

It's getting dark, and the snow is still falling. The tracks are round, an inch and a half or two inches in diameter. They are displaced laterally about three inches, indicating that their maker has a fairly broad body. They're a foot apart, maybe a bit farther. I double back on the trail, while Wayne takes it forward. I find nothing diagnostic — no feeding sign or fur or droppings — so I rejoin Wayne, who has followed the tracks down to the run.

They aren't mink tracks. We actually find some mink tracks near the stream,

and the mystery tracks are much bigger; nor are they paired, like the bounding mink's. They aren't fox tracks, since they're not in a straight line. Bobcat? Maybe; the stride is about right, although the prints are a little small. Not deer and not dog. Finally, I suggest otter; Wayne nods hesitantly, then shakes his head. Otter tracks, when I check in a book later, are a lot bigger than these; besides, an otter often bounds.

The tracks carry on beside the stream. The light is blue and dwindling. We shrug, turn away, and head for home. Six inches of new snow fall in the night.

### **Little By Little**

Washington, D.C., gets more snow than Antarctica. Antarctica's average annual snowfall is only five inches. But because of the area's frigid temperature, the snow doesn't melt. Instead, it piles on top of the previous year's snow, forming a thick ice cap.

### **Glad Someone's Watching**

If an unusually large number of insects gather together, scientists from the U.S. Department of Agriculture will know it. Scientists are using radar to detect mass insect migrations. This could help improve pest control nationwide.

## **NHF Day Poster Contest**

To give more students the opportunity to win in the National Hunting and Fishing Day Poster Contest, the number of national awards has been increased. This year's contest will have 67 awards totaling over \$6000 in U.S. savings bonds, including a grand prize of a \$1000 bond for the student who best illustrates the 1985 contest theme, "Why Wildlife Needs America's Sportsmen." The contest is open to all students in grades 5–12. It is divided into a Junior Division for grades 5–8 and a Senior Division for grades 9–12. In addition to the grand prize, first-, second-, and third-place prizes of \$500, \$250 and \$100 savings bonds will be awarded in each division, and there will be a total of fifteen honorable mention prizes (\$75) and merit awards (\$50). Deadline for entries is April 19. To be considered for national awards, posters must first be winners in a local contest sponsored by a newspaper, sportsmen's club, school, or other interested organization. Winning local posters should be sent to NHF Day headquarters for national judging by April 19. For information on sponsoring or participating in a local contest, write to NHF Day Poster Contest, P.O. Box 1075, Riverside, CT 06878.

## **Wild Turkey Federation Banquet**

The 10th anniversary convention and banquet of the Pennsylvania State Chapter of the National Wild Turkey Federation will be held on March 15–16 at the Marriott Inn, in Harrisburg. Activities will include nine seminars by wild turkey experts. For further information, contact Donald Heckman, 14 Slate Hill Road, Camp Hill, Pa. 17011 (717-761-5925). For exhibitor information, Terry Hyde, 613 W. 4th St., Tyrone, Pa. 16686 (814-684-4832).





**LITTERING SHOULD BE AVOIDED** when hunting. This group is utilizing a public picnic area for lunch, so can easily dispose of trash in available receptacles.

# Bowhunting Ethics

By Keith C. Schuyler

Photos from the Author

**M**ORE AND MORE there is an accent on ethics in hunting generally, and specifically with the bow and arrow. Certainly some of the pressure is generated by anti-hunter activities, but I think other factors have a much greater influence on archers.

Today they are better educated. By comparison to many sports in Pennsylvania, archers are more organized through local, state, and national organizations, and these associations tend to make the individual more aware of a responsibility to his sport. Although archers are less visible in their hunting pursuits, their activities are more likely to attract bad press if a wounded animal or a bird is seen carrying an arrow, whether it was a legal or an illegal attempt to make a kill. Bow hunting per se has become much better accepted by both the public and firearms propo-

nents, but those who hunt exclusively with the bow, or as a supplement to gun hunting, must recognize the necessity to present their best, and to improve upon their image.

We usually depend upon preachers, teachers, and parents to keep us clear of law infractions in our normal activities. But, except for the person fortunate enough to have a parent, or parents, capable and interested enough to instill in us a love and respect for the creatures we hunt, we must acquire such feelings. There are laws designed to keep us in line if we are unfeeling or slow to learn.

Aside from all this, in the sport of hunting there are unwritten rules and inner emotions which transcend those enforced upon or suggested to us. Each of us must develop a personal code that becomes a sacred set of commandments imprinted upon our souls.

There is no guarantee that any of us will never violate our personal codes any more than we can avoid unintentional infractions of man-made laws. A wristwatch can stop before quitting time, a newly erected mobile home can be hidden just over a hill to provide a safety zone where you have hunted all your life, a ringneck cock can cackle as he shares the air with a long-tailed hen rising into the sun, a projectile can kill a hidden doe intended for a visible buck, a shot at a running rabbit can kill both the rabbit and a pheasant that chances to be sitting in the line of fire.

Nevertheless, each is a mistake that can draw a penalty. I am reminded of the late Lew Estep who spent most of his adult life as a game protector. If somebody made an honest mistake when hunting with him, Lew might have a good laugh over it, but you paid. My personal approach, when directing a deer hunt, has always been, "If you mistakenly make an illegal kill, I'll help pay the penalty. But if you make one and try to get away with it, I'll turn you in myself."

Somewhere we must draw the line. On one side of the line is a barrel of excuses, a "do as I say, not as I do," a sadistic bent, scorn for the law, or weakness in character. On the other is this thing called *ethics*.

All dictionaries play around with this word, but one definition that best fits the direction intended here is: "a group of moral principles or set of values."

It doesn't say whose or what principles or values, even though they generally attach to some profession or activity. Laws are not mentioned. Written rules provide only a guide, generally based upon basic principles or values, beyond which you may not stray without invoking penalties provided for such

infractions. Laws in themselves are not ethics, but it follows that they provide a *minimum* guide for a set of rules to live by within any pursuit.

Laws, written by man, can be changed by man. But it is seldom that an individual will change the rules written upon his heart. Certainly not without paying a penalty to his conscience far more bitter than the blow to his wallet imposed by breaking the law.

### Illustration

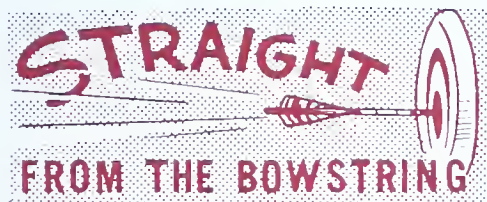
For illustration, let us suppose that a lone bow hunter, with five minutes to spare during legal shooting hours, has a long woodland shot at a deer in the rain. Nothing in the law prohibits the shot. But a knowledgeable bow hunter knows that, unless he makes a hit that will drop the animal within his vision, chances of recovery are slim. It is already darker than usual for the time of day because of the rain, it is a tough shot because of the distance and the marginal visibility, and that same rain will wash out any blood trail in approaching darkness.

Let's change the situation a bit. The same hunter, in a group, is on stand with circumstances much the same except that rain, which had only threatened, now comes down in buckets. And the drivers must be at least several hundred yards distant. It is ten minutes to quitting time. Again, the law is on his side.

But where does this bow hunter draw *his* line?

There are many situations in which a hunter finds himself protected by the law, but exposed to his conscience and the urgings of commonsense. Mishaps are more apt to occur when the situation is marginal, and apprehension tugs against normal skills and caution that are available when circumstances are favorable.

These are the times when individual ethics should be exercised. No man can draw a line for another. Each situation is different. Perhaps there would be varied suggestions even among those who extend their personal commitment





to excellence in judgment well beyond the limitations of law.

Certainly one who consciously breaks the law is not an ethical hunter. But a law-abiding hunter is not necessarily an ethical hunter. There is an area beyond legal constraints wherein we should establish personal limitations. No set of personal rules can cover all situations.

### Concern and Compassion

Perhaps a good starting point would be simply to have due concern and compassion for both other hunters and the hunted and to avoid any action which might waste a natural resource.

The preceding guidelines assume at least a fundamental knowledge of hunting, safety rules and woodsmanship, as well as a desire to qualify as a true sportsman. Hunter education, mandatory for any who have not purchased a license before, ensures today that all new hunters are at least exposed to the fundamentals. National Bowhunter Education Program goes a step further, for those who plan to hunt with the bow and arrow, in a voluntary course specifically designed for archers.

Meanwhile, some rules covered either

by the law or commonsense can help improve the image of bow hunters and bow hunting. And these are only examples.

Latching a fence gate, if it becomes necessary to pass through, is most important. Owners of livestock are generally liable if animals stray to other property and cause damage, or upon the highway to cause a vehicular mishap. Aside from the fact that such liability might be passed to you as the guilty party, no thinking archer wants to offend landowners who are hosts to hunters. Whether or not livestock is visible, it is only common courtesy to leave property as you find it. If you are a guest, a closed gate or fence is an intended barrier to those uninvited, even as a door to a building serves the same purpose.

It is possible to lose arrows in fields under cultivation. Some arrowheads today are made of stainless steel and will last indefinitely. They can be picked up by hay or straw balers and later cause injury to livestock. A detached head can be ingested by cattle to cause internal injury and possible death. Metal shafts can damage farm machinery.

**BEING AN INVITED GUEST on farm properties removes any obstacles to full enjoyment of the hunt. Courteous actions result in repeat invitations.**







**LEIGH NUNEVILLER**, president of Pennsylvania Bowhunters Society, fastens gate after passing through during woodchuck hunt in Tioga County, a fundamental courtesy.



**KNOWING THE** correct time makes it easy to stay within legal hunting hours as well as to keep commitments to hunting companions.

Consequently, if an arrow misses the intended target and lands in any field, special effort should be made to recover it. At the cost of today's arrows, the vast majority of hunters would do so in any event, but the preceding is another important reason to avoid leaving an arrow behind.

Even a broadhead in a tree has the potential to cause problems. A sawyer may lose both his religion and a good saw at a later date. There are tools made to remove broadheads from trees with little damage. In the event a deeply imbedded head defies normal attempts to remove it without damage, use any instrument—a pair of pliers or the nearest rock—to get it out of the tree.

Sharp broadheads are central to maximizing the killing power of the modernized but still primitive bow. Those who use dull heads do a disservice to the sport by risking only wounds to big game that might otherwise be fatal if such heads were properly sharp.

Careless vehicle parking is another offense which should be avoided. Park-

ing too close to another vehicle can make it impossible for some other hunters to leave until you are ready. Or it can result in damage to one or both vehicles when trying to get back on the road. Of course the law covers parking so that a landowner is not prevented getting in or out of his property. It also has penalties for driving over cultivated fields.

It seems a small thing, but letting rubbish such as sandwich bags, candy bar wrappers, and other scrap paper lie around in the woods is not only illegal but also unsightly. Reserve a pocket for such material. Too often a well meaning hunter will stuff it into a loaded pocket from which it emerges on its own or is pulled out and lost when some usable object is needed.

One of the most important accessories to a hunt is a timepiece. It has a number of uses aside from keeping within legal times for hunting. Drives can be planned around specific times so that everyone is aware of when to expect action and to anticipate when it should be over. If someone doesn't

show up within an allotted time, it may mean he has wandered off in the wrong direction.

Probably the worst offense is for someone to leave a hunt without telling anyone. It can really mess up a group that is scouring the mountains while some clod is enjoying a football game on TV. It happens, and it is a gross breach of ethics.

Any time a hunter is on farmland, the resident farmer has the right to know who his guests are in the woodlot. It is so much better to know that you can park and bring your trophy to the farm buildings than to wonder if you might be arrested for trespassing.

Reporting a deer, bear, or turkey kill is an important action in compliance with the law and a necessary requirement to improve the sport in Pennsylvania.

There is always an internal conflict when you witness a flagrant violation

of the law. But the stigma one time attached to reporting such violations has largely been removed by more widespread recognition that it is a duty to make everyone play the game fairly. It isn't usually necessary to become personally involved, but if your testimony should be required, be willing to assist in cleaning up black marks against the sport you obviously love so well.

Nationally the accent is on ethics. As an example, the Izaak Walton League and Fred Bear Sports Club combine to produce a quarterly news release entitled *Outdoor Ethics*. Observance of necessary but basic laws is no longer enough. Those who do not hunt, a vast majority, are being peppered with propaganda by the anti-hunters, a tiny but vociferous minority.

The law permits almost anyone of age to be a hunter. Observing a personal code of ethics makes this hunter a sportsman.

# GAME NEWS

Enclosed find check or money order for \$ . . . . . for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW      ☐ RENEWAL      \_\_\_\_\_  
(Check One)      ACCOUNT NUMBER

In U.S.   ☐ 3 Years \$16.50      ☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

GAME NEWS Binder (Holds Twelve Issues of the Magazine)

☐ \$3.50

Name . . . . .  
(print plainly)

Address . . . . .

City . . . . . State . . . . .  
(Zip Code)

NOTE: All remittances should be made payable to the

PENNSYLVANIA GAME COMMISSION

Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567

DO NOT SEND CASH

Please allow 60 days for first copy.



**GUNSMITH JIM PEIGHTAL compares his custom 7mm-08 with Lewis's Model Seven Remington. Jim used Remington action, Douglas barrel and Brown fiberglass stock for his featherweight outfit.**

**“THE CALL** is for you,” Helen said over the intercom.

“Thanks,” I answered, picking up the office phone. “Lewis speaking.”

“I just finished reading your shotshell column in the August '84 issue of **GAME NEWS**, and it changed my thinking.”

“In what way?”

“Well, I've always been a solid believer in long barrels and tight chokes. I believed with a pure heart that long



## YEAR OF DECISION

**By Don Lewis**

**Photos by Helen Lewis**

barrels shot farther and you simply couldn't have too much choke. After reading that the longest rabbit shot you made in two seasons was just 32 steps, I began to think about my trips afield. I suddenly came face to face with the fact that I had missed a lot of close shots, and that I could recall only a few shots that could be classified as long.”

“Are you blaming the misses on too much choke?”

“Now I'm convinced that's the reason. As I stated, most of my shooting would fall in the 20 to 25-yard category. With a full choke tube, I was defeating the purpose.”

“You've begun to see the light,” I said in a joking manner. “Too bad more small game hunters won't evaluate their hunting shots. I have no statistics to prove this, but I feel the rabbit and grouse hunter has little need for a full choke barrel. This is especially true if most of the hunting is done in areas covered with heavy weed patches or

thick vegetation. Open farmland hunting might require a tighter choked tube, but rabbits and grouse are usually found in thick stuff.”

“That's exactly what I came up with. I hunt grouse in thick grapevine patches where a 30-yard shot would be long and most shooting will be under 25 yards. After reading your article, I could see I need a short barrel bored improved cylinder.”

“I mentioned that I'm a 26-inch two-barrel 20-gauge fancier. Bored improved cylinder and modified, that's been my favorite upland gun for many years.”

“That probably is good advice, but I'm parting company with you on that point. I'm a 12-gauge pump fan from way back. I'm set up for 12-gauge reloading and have hundreds of AA cases. So I won't follow your example on the type and gauge of shotgun, but I am going to the 26-inch barrel and IC choke.”

Choke boring was discovered more



than 100 years ago. Fred Kimble, an Illinois waterfowl market hunter, learned that by putting constriction in the muzzle of his shotgun, he could reach out farther and make cleaner kills than with the type of barrel normally used then. (I have to say that researchers are still arguing over who discovered choke, but it makes little difference; it changed the thinking of shotgun makers.)

Early shotguns had no choke. The barrel was just a straight tube, or what could be called a true cylinder bore. Then came that magic constriction called choke! Maybe I'm going out on the limb, but I think it might have been the competitive shooter that put choke on the shooting map. The cylinder bore shotgun might get 100 pellets in a 30-inch circle at 40 yards, but some of the better choked outfits could double that with ease. Not only was the choked tube winning matches, but it had benefits for the long-range hunter, too.

The mad rush for the choked tube which began over 100 years ago is still strong in the minds of many small game hunters. Yet, let's go back a century and see how some of the better field shots thought about the full choke barrel.

The hunters of yesteryear felt that tighter patterns at the longer distances would automatically mean more game killed. This same philosophy reigns

supreme with thousands of small game hunters today. But it doesn't quite work like that. Extending the killing range is of little use if the effective hitting range is not also extended. In other words, the hunter must be capable of hitting at longer ranges. That's where the trouble begins.

A rabbit running full stride is four times easier to hit at 25 yards than at 45. An angling grouse that gets beyond 30 yards isn't in much danger from the average hunter. The grouse specialist might handle the shot, but even the specialist doesn't have a cut and dried formula. Ask any pheasant hunter about 45-yard shots. Even apparent straightaway jobs (which aren't straightaway for the most part) are exceedingly tough at long ranges. The few exceptions where a dove is dropped at 55 yards or a rabbit is flopped at a half a football field length prove little. Facts are facts, and facts show emphatically that most of us will do better where shots are under 35 yards—and that essentially rules out the full choke barrel.

### Unfit for Field Use?

Early converts to the choke tube discovered to their dismay that while they had tighter patterns at longer ranges, they also had tighter patterns at the shorter ranges, making it difficult to score on close shots. Could it be that excessive choke was not all it was cracked up to be? The famed English gunmaker William Pape, who is also credited with discovering choke, practically aborted his new creation because he felt that guns carrying tight choke barrels were actually *unfit* for field use. That's getting bit on the hand by the mouth that feeds you!

The disadvantages of a tight-choke barrel far outweigh the advantages. Some won't accept that, but it's true just the same. With a full choke barrel, the hunter is almost forced to aim on close shots. Truth is, close shots are the Achilles' heel for the full choke tube. A shotgun pattern expands as it moves forward. Normally, the hunter doesn't have to make a pinpoint aim with the

**MARLIN M336 ER (Extended Range) Carbine is now chambered for the new 307 and 356 Winchester loads, which makes this popular outfit even more effective for deer and bear.**





scattergun because the expanding pattern makes up for small pointing errors. But this is not the case with the full choke barrel. Here's why. Generally speaking, a full choke tube delivers close to a two-foot pattern at 20 yards. At 30 yards it will expand to just under three feet, and it will be around the four-foot mark at 40 yards. The improved cylinder opens up to three feet at 20 yards (about the same as the full choke at 35 yards) and is around the four-foot mark at 30 to 35 yards.

Now, statistics show that most upland game birds and animals are taken at 30 yards or under. Why in the world does a hunter want to lug a long, full choke barrel that will be effective on less than 10 percent of his shots afield. It just doesn't make sense. It's a fact that shotgun pellets can not be guided individually; the hunter depends on the pattern to make the kill, and the wider the pattern, to a point, the greater the chances are for hitting the target.

I don't argue the point that a wider pattern is also a thinner one. However, this drawback can be offset by using a heavier charge of lighter shot. Don't think for a minute that 7½ or even number 8 shot won't be effective at 30 yards. I prefer an ounce of 8s for the I/C barrel and 1⅛ ounces of 7½s in the modified tube. Normally, I like a little more velocity for the 7½ charge. Many times I go to the 3-inch shell in the choked barrel.

The coming year could be one of decision for the rifle hunter. The small game hunter in the beginning of this article came to grips with his field shooting and, after proper evaluation, made a wise choice. Over the coming years, he will notice a distinct difference in the success ratio. This could be just as true for the rifleman. I'm the

first to admit there is a small segment of big game hunters who know precisely what they need. Chances are good they have it, too. That's not the case with the majority of deer and bear hunters. Not everyone is so dedicated to shooting that he will have the knowledge and experience to make the correct choice of caliber and type of action. Many times big game rifles are just bought. There's no question whether a 30-06 or 7mm Magnum can turn in a superb job in the deer or bear woods, but that's not the total answer. While these two calibers have all the requisites for the big game woods, they are not for everyone.

I have to keep saying the rifle (meaning caliber, action type and cartridge size) must be compatible with the hunter. Weight is also a much discussed subject in the modern rifle realm. Yet, it's possible to get a rifle too light. My good stockmaker friend Jim Peightal of Ernest worked a 7mm-08 down to just over 6 pounds with a Leupold compact scope. That's a light rifle, but there's more. First, the Remington 7mm-08 cartridge is not high in recoil so far as big game cartridges go, but in a 6-pound rifle, it produces quite a punch. Also, light rifles almost have to have

**ITHACA M51 autoloader is an excellent choice for turkeys, as Russ Whittaker of Cowansville proved with his 12 gauge. It's also made in 20, for upland hunting.**





short, thin barrels, and it doesn't take many shots for such a barrel to become very hot. Many hot barrels don't stay accurate very long, and rifles that literally pound the shoulder black and blue keep practice sessions to a minimum.

A vast number of shotgun hunters still believe implicitly in the long, full choke barrel, and there are thousands of big game hunters who think only in terms of sheer power. Powerful rifles aren't pleasant to shoot. Consequently, the hunter is deprived of much needed range practice. How much better it would be to go with the 25-06, 7mm-08 or one of the 6mm calibers if recoil is becoming a physical and psychological problem.

The female hunter hasn't had an easy time of it. For years, she was literally forced to use a rifle not suited for her, either physically or psychologically. She could be seen carrying a 22 Hornet or the 25-20. It was thought the lady of the house wasn't capable of handling the larger cartridges. Either of those cartridges can kill deer, but they aren't deer cartridges.

The picture has changed today for the female hunter. She is no longer

the weaker sex by any means. Being married to a shooting wife, I learned a long time back that the distaff side of the family can enjoy hunting and shooting to the fullest. Unfortunately, the female hunter mostly used what someone else didn't want. Since the skeletal makeup of the female is normally smaller, high recoil shotguns and rifles should be avoided by women. Naturally, it depends entirely on the individual. Helen shot dozens of magnum-type rifles when I had the sight-in range. Today, she hunts deer with a 25-06 that has been cut down to 13 inches in stock length (from the face of the trigger to the recoil pad at its midpoint), including a half-inch thick recoil pad.

### Not Sold on 6mm's

I'm not entirely sold on any 6mm cartridge as a big game getter, but tens of thousands of hunters have had fine success with them. Much depends on the bullet. Those of proper construction and weighing 90 to 105 grains seem best for deer. One of the 6mm's is probably the right cartridge for the youngster who still has a lot of growing to do, or for the female who has an inherent fear of recoil. Stay away from the 224 high speed varmint cartridges. They surely have the velocity, but bullet construction is definitely not for big game. Lightweight bullets designed for varmint shooting are not constructed for penetration. There is a high risk of causing a superficial wound that allows the animal to escape and die wastefully.

What about the year ahead for the varmint hunter? I have claimed several times over the 20 years I've written this column that the best mousetrap in varmint cartridges hasn't been built. Some of the top varmint cartridges now available on the store shelves were originally wildcat creations. I'll mention the 22 Hornet, actually wildcatted from the old 22 Winchester Centerfire, and the Remington 22-250 as examples.

Jim Carmichel, shooting editor for *Outdoor Life*, has an excellent piece in the May 1984 issue on the wildcat 22



LEWIS finds new Ruger M77/22 an outstanding rimfire for squirrel hunting. Weaver KT 6x makes bullet placement easy at any range where the 22 long rifle load is effective.



CHeetah. Jim says that a few years back he got to thinking about incorporating modern accuracy technology in a quest for ultrahigh velocity. His idea was to combine the best of both worlds in a "varmint cartridge that reaches out faster, farther and flatter than anything you can buy on today's market while, at the same time, providing tackhole accuracy necessary to make long-range hits a practical proposition, rather than just a theoretical possibility."

This wildcat can generate 4,250 fps at the muzzle with the 55-grain 224 spitzer bullet. That's about 500 fps faster than the 22-250. Apparently, there are two versions of the CHeetah — the Mark I with a very sharp (fire formed) 40-degree shoulder and the Mark II, which has a 28-degree shoulder (the same as the 22-250's).

An unusual aspect of the CHeetah is its use of a small primer. Cases come from the Remington BR case, which is the same as the 308 Winchester case except it has a small primer pocket. The reasons for the small primer pocket are important, but I'll get to them in a later column on this new wildcat.

Jim Peightal is tooling up to chamber several barrels for the 28-degree shoulder angle, and I hope to have a heavy barrel version by the end of winter. Barrels, barreled actions, and finished rifles can be purchased from Marquart Precision Co., Box 1740, Prescott, Arizona 86302; Shilen Rifle Co., 205 Metro Park Blvd., Ennis, Texas 75119; and Wichita Arms Inc., 444 Ellis, Wichita, Kansas 67211. Case-forming and reloading die sets are available from Huntington Die Specialities, Box 991, 601 Oro Dam Blvd., Oroville, California 95965.



**MANY HUNTERS** are switching to short-barreled doubles, particularly for upland game. Both S/S and O/U models are popular, and straight English-style grips are gaining converts. However, new users should realize that they take a different handling technique.

Carmichel says the new wildcat hasn't been copyrighted since it is not a profit making venture; it is a gift from *Outdoor Life* to the shooting public so that all can benefit from the remarkable performance it offers. He also says, "Because the CHeetah is now a part of the public domain and can be chambered, sold, modified and loaded by anyone, *Outdoor Life* and Jim Carmichel can not and do not accept any responsibility whatever for accidents."

With its high velocity and pinpoint accuracy, the CHeetah may be just what old varmint hunters like myself have been waiting for. It sure looks as if this will be a year of decision for me.

## Thoughts While Walking

*Arms and the man I sing.*

—Virgil

# In the wind

bob mitchell



Ducks Unlimited, after 47 years of concentrating their efforts in Canada, where 70 percent of the continent's waterfowl nest, is embarking on a project designed to enhance waterfowl habitat in the United States. A \$400,000 project has been undertaken to convert a peninsula in North Dakota's Lake Arena into an island so nesting waterfowl will be safer from fox, raccoon and skunk predation.

Indiana has become the 36th state to permit mourning dove hunting. According to the Wildlife Management Institute, the Hoosier State boasts a mourning dove population of at least 4 million, and that the 10 percent expected to be taken by hunters will have no effect on the population as 60 to 70 percent die annually of natural causes.

To determine if a disproportionate number of Canada geese are being taken in northern states before they can reach southern states, nearly 8000 geese already have been banded with prominent neck collars to help researchers throughout the Atlantic Flyway learn more about the seasonal movements of geese and the effects of hunting seasons on these movements. Another 40,000 geese are expected to be marked before the project ends.

**Two North Carolina men arrested for poaching were assessed wildlife replacement costs for five deer, the two does they shot and the three unborn fawns the deer were carrying. This represents the first time wildlife replacement costs, which in this case totalled \$1400 (\$280 per animal), have been assessed for unborn young.**

The arctic peregrine falcon has been reclassified from the endangered to the threatened category as it's no longer considered "in danger of extinction throughout a significant portion of its range." An estimated 3000 pairs nest in the Arctic and sub-Arctic areas to North America. They winter south to South America.

**How long can deer live in the wild? As reported in *Alabama Conservation* magazine, a doe stocked as a juvenile in 1960 was taken during their 1981 season. She lived to be over 20 years of age. Another doe, stocked in 1961 when she was an adult, was harvested in 1983, making her at least 23 years old. In addition, both deer were taken close to their release sites.**

Missouri, which in 1977 enacted a  $\frac{1}{8}$  percent sales tax to finance fish and wildlife management programs, has now enacted another  $\frac{1}{8}$  percent sales tax, this one to finance soil conservation projects and the state's park system. This new tax is expected to provide \$30 million annually, and will permit the state to embark on long range programs without worrying about funding from year to year.

**The National Wildlife Federation reports that over half the aluminum cans produced in the U.S. are recycled, and that in some instances a can leaving the store is back on the shelf within six weeks.**

Undercover conservation officers in Vancouver recently broke what officials consider their biggest poaching case. More than 100 charges may be filed against seven individuals for poaching and selling elk and deer. Charges also may be filed against those who purchased the illegally taken game.

Virginia's Ukrops Super Market chain featured one of the state's endangered species, the loggerhead sea turtle, on their fall grocery bags to help promote the state's nongame and endangered species program. The bags, which were designed so they could be cut and made into covers for textbooks, included facts about sea turtles and where more information about endangered species can be obtained.



Make check or money order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**

**P.O. Box 1567  
Harrisburg, PA 17105-1567**

Pennsylvania Game Cookbook is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered.





## **Voluntary Waterfowl Stamp**

Waterfowl hunters and collectors have the opportunity to purchase Pennsylvania's second annual waterfowl stamp. Created by wildlife artist James H. Killen and featuring three Canada geese, the 1984 stamp is reproduced above. It is available from the Game Commission's Harrisburg office, field division offices, the Pymatuning and Middle Creek Wildlife Management Areas, and selected hunting license issuing agents. Price is \$5.50 delivered, and purchase is strictly voluntary. Income from these sales will provide additional funding to buy wetlands, create waterfowl habitat, and assist in financing wildlife management programs. Signed and numbered fine art prints are available from art dealers and galleries nationwide.

# PENNSYLVANIA GAME NEWS

FEBRUARY, 1985

60 CENTS







Shown here are seven of the publications now available from the Game Commission. In addition, Chuck Fergus's new book, a collection of his Thruapples columns entitled *The Wingless Crow*, can be ordered from this office for \$10. All prices include tax, handling and postage.

Make check or money order payable to:

PENNSYLVANIA  
GAME COMMISSION  
P.O. Box 1567  
Harrisburg, PA 17105-1567

<i>Birds of Pennsylvania, by James and Lillian Wakeley</i> .....		\$10
<i>Mammals of Pennsylvania, by J. Kenneth Donitt, et al.</i> .....		\$ 4
<i>Gone for the Day, by Ned Smith</i> .....		\$ 4
<i>Pennsylvania Wild Game Cookbook</i> .....		\$ 4
<i>Pennsylvania Trapping Manual, by Paul Faylor</i> .....		\$ 3
<i>Woodlands and Wildlife</i> .....		\$ 3
<i>Ducks at a Distance</i> .....		\$ 2



## A Reasonable Fee

AS MOST HUNTERS doubtless know by now, the Game Commission is asking the Legislature for an increase in the hunting license fee. Or more precisely, for fee increases of the various hunting licenses and stamps available in Pennsylvania. In addition, the Commission wants to set up a number of new licenses related to trapping and nonresidents. These will not be listed here as they are covered in Executive Director Peter Duncan's article in this issue. That article explains in detail all aspects of the situation. We urge you to read it completely—to study it if you will, or at least to think seriously about everything presented there.

As Director Duncan points out, the Game Commission's financial situation is such that additional annual revenue of almost \$15 million is necessary. When I told that to a fellow at the rifle range the other day, he immediately asked, "What new programs do we get for such money? Maybe you guys are getting into things that hunters don't think are necessary." Some of this money would go to new programs. But most of the additional requested revenue is needed just to continue paying for programs which have been ongoing for years—research on many species of wildlife, land purchases and management, enforcement of the Game Law, educational programs, etc.—programs which are absolutely necessary if the Pennsylvania Game Commission is to maintain its place among the leaders in wildlife management and conservation.

Anyone who looks at the situation objectively must recognize that it costs much more today to do anything than it did just a few years ago. When you consider that it has been twelve years since the last increase in the resident hunting license fee, it should be obvious why one is now needed. We put it that way—"resident"—because the first thing another man asked me was why the Commission was not requesting an increase in the nonresident fee too. He apparently had been listening to rumors. Significant changes in the nonresident licensing structure *are* being requested. And it should be remembered that the nonresident fee has been increased twice since the last resident increase—to \$50.50 in 1979 and to \$60.50 in 1980. The fact that some 75,000 nonresidents are glad to come here annually should give residents some idea of the way Pennsylvania's hunting possibilities are viewed by others. That in itself should make us—you and me—willing to pay a reasonable amount to hunt here. And \$15 for a license seems reasonable to me. That's less than a nickle a day on an annual basis, or an increase of about two cents a day over the current cost. It's hard to believe this is a consequential amount to anyone who spends more than \$15 for a single tankful of gasoline.

Leaving such comparison aside, the fact remains that if this fee increase is not approved, Game Commission wildlife management and services to sportsmen will deteriorate. This agency must live within its annual budget. For the PGC there is no borrowing, no deficit spending. If money is not available for a program, the program is cut and hunters lose. In the end, if you and I want something, we have to pay a reasonable amount for it. In hunting, as in anything else, there's no free lunch. — *Bob Bell*

**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Donald R. Craul**, President  
Lewisburg & Wellsboro  
**Thomas P. Greenlee**, Vice-President  
Tionesta  
**Taylor A. Doebler, Jr.**, Secretary  
Jersey Shore  
**Edwin J. Brooks**  
Lansdale  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**C. Dana Chalfant**  
Gibsonia  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starner**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor

**GAME COMMISSION**  
(717) 787-4250

**FEATURES**

<b>Barn Pigeons—The Wingshooter's Delight</b> .....	3
By R. W. Conrad	
<b>Dad's Way</b> .....	6
By Gary J. Williams	
<b>Needed—Hunting License Fee Increase</b> ..	10
By Peter S. Duncan	
<b>The Wrong Way to Hunt Bear</b> .....	17
By Kirk J. Zucal	
<b>Of White Men and Wildlife</b> .....	20
By Tom Eveland	
<b>A Look at Trapping</b> .....	25
By Joe Kosack	
<b>Lot of Bull</b> .....	28
By Dave Lonich	
<b>Treetop Browse</b> .....	41
By Steve Liscinsky	

**NEWS**

<b>Books in Brief</b> .....	31, 40, 45, 49
<b>Field Notes</b> .....	34
<b>Conservation News</b> .....	39
By Ted Godshall	
<b>In the Wind</b> .....	64
By Bob Mitchell	

**COLUMNS**

<b>Young Artists Page</b> .....	43
<b>Outdoor Wildlife Learning</b> .....	44
By Bill Einsig	
<b>DGP Diary</b> .....	47
By Joe Carlos	
<b>Thornapples</b> .....	50
By Chuck Fergus	
<b>Color Combinations (Archery)</b> .....	54
By Keith C. Schuyler	
<b>Beat the February Doldrums (Guns)</b> .....	59
By Don Lewis	

COVER PAINTING BY FRANK FRETZ

PENNSYLVANIA GAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Second-class postage paid at Harrisburg, Pa. CHANGE OF ADDRESS: POSTMASTER: Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1985 by the Pennsylvania Game Commission. All rights reserved.

NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.



THE BIRDS ARE COMING in fast. Must be 35 or 40 of them. Their wings are beating strongly against the wind. They are about 40 yards out and closing. I hear my partner's 20-gauge crack.

## ***Barn Pigeons— The Wingshooter's Delight***

**R. W. Conrad**

I AM HUNKERED down at the leeward side of a barn in the mid winter month of February, sitting on an empty five-gallon pail with the wind howling around the middle of my back, where my pants and jacket never quite meet. Chills run up and down my spine like cold fingers. I am trying to hide, but know I am not being successful. It is hard to become part of a barn.

My partner is in the doorway of an implement shed to my right and out of my sight. We spot birds for each other in this kind of situation. He is now shouting above the wind, "Here they come, a whole bunch comin' up the chute!"

The "chute" is a depression between two fields intersected by a hedgerow. The natural depression slopes away

from the barn and acts as a drain for the barnyard. The birds are coming in fast. Must be nearly 35 or 40 of them. Their wings are beating strongly against the wind. Another hundred yards and they will be home to rest, strut around, and do their yoddle cooing. Now they are about 40 yards out and closing. I hear my partner's 20-gauge crack and once again. Two drop in the barnyard. Feathers float on the wind.

The birds wheel away, but a loner keeps coming. I raise my 12-gauge, swing, slap the trigger. Another one down. The flock hightails it out over the pasture, turns and starts back, a little higher this time, a little more cautious, but still the homing instinct is strong. They are determined. So are we. This time they must be at least 40 yards up.





They set their wings and glide with the wind in their tails, over the barn and around behind us in a wide wheeling turn. They are coming in again. Really fast this time. The 12 is up without my knowledge, as if it had a mind of its own. Difficult shooting. Judge their speed, lead about a foot, slap the trigger once, twice, and again straight up. Two more down. Feathers floating everywhere. The 20 cracks twice, one more down. This time the flock leaves. Now is the time for retrieval and to clean up the spent shells. The birds will be back.

As I slog through the glop in the barnyard, I wish I had a good retrieving dog. But almost all of the farms have dogs around, and to keep everything cool I leave my dog at home.

### A Pigeon Hunt

Except for the buildings, the opening scene could have described a typical hunt for doves or ducks. It's not. This is a typical midwinter afternoon pigeon hunt. It is just as exciting and just as much fun. Since the action is faster, the cold winds do not seem quite so cold. This is central Pennsylvania, home of deer and turkey, but not much in the way of wingshooting. We get a dusting of doves and a few ducks, but nothing like the eastern part of the state. What we do have is a bird that flocks in the hundreds and does no appreciable amount of migrating. It is a source of year-round shooting enjoyment. A pest to farmers and urban dwellers alike, this bird is the common barn pigeon.

Barn pigeons are not game birds and

therefore are not protected by game laws. Open season all year. All you need is a few friendly farmers, a good shotgun, some free time and a bushel basket full of shells. This bird broods all year. It takes about six weeks from the laying of eggs until the young are in the air. There is little fear of eliminating the entire population.

The guns and shells we use are a matter of choice. I like my Remington 1100 with high-brass 6s and 7½s, while my partner uses a 20-gauge auto with 7½s. Magnums are reasonable, but not needed. You just have to wait for the birds to come into reasonable range.

Sure we get lucky sometimes on high flyers, but that's pure luck and not often duplicated. I cannot recommend a 410 for this kind of shooting, but I have hit pigeons with them. Whatever gun you feel comfortable with will do the job, and whatever size shot patterns well in that gun should be your choice.

My shooting partner, Joe Smith, and I got started in this quite by accident. We had been pass-shooting doves on a friend's farm during the 1979 fall season, and later he asked us to shoot off some of his barn pigeons. We were just average wingshooters, and at the time were not too keen about shooting an inferior bird like this. But the farmer kept after us and we finally relented. In October 1979, we began shooting barn pigeons. Allowing time out for the regular seasons, we shot on and off until the end of the year. By that time we had the farmer's problem pretty well under control, but we were hooked.

A pigeon is slower in flight than a dove and doesn't display the acrobatic stunts that its cousins do, but the pigeon will take a good load of shot, shed a puff of feathers, and then keep on flying. They are easier to hit than doves, but harder to kill.

In our pigeon shooting baptism, we managed to bag over one hundred birds. The early shooting was pretty easy, by our standards. We would scare them out of the barn, and it was like trapshooting. The birds were not

frightened by gunfire and kept swinging back to the barns or feeding stations. But it wasn't long before they became wiser. Once they discovered they were the primary targets, they stayed out of range and tried to sneak in behind us, or flew overhead and come straight down in a power dive with their wings back and locked. Hitting one in that diving attitude took some shooting. When we did hit one, it dropped like a bomb.

As time went on we found that a flock that has been shot into for a length of time becomes just as wary of people as spooked ducks. You must stay out of their sight, well hidden, until the proper time and distance is established. Even then you must be fast and accurate. A blind of some sort is essential. We generally use the farm buildings or equipment that is sitting around, but out in the fields near their feeding stations we usually sit in high grass or unharvested corn. Sometimes we must wait more than an hour for the birds to reappear.

Most birds we take are either used by our friends in dog training or consumed as table fare. They rival the dove in that respect. The breast of a pigeon is very dark rich meat, and when properly prepared equals the dove. Younger birds are more tender and taste better. Any recipe you use for doves can be duplicated for pigeons.

Pigeons roost and brood anywhere

they feel protected. It may be a barn or silo, but more often than not it will be a building in an urban area. We have found massive flocks in stone quarries and under highway bridges. The problems to farmers come when the birds feed in their fields. Naturally, each farm has a few birds, but these attract outside birds that use the barns and silos to rest between feedings.

### Many Problems

These transient birds create many problems for the farmers. Massive piles of droppings in the conveyors and on stored implements are major ones. Most farmers are happy to allow shooting privileges around their buildings if asked courteously and shown that guns will be handled safely. We shoot at about twenty farms in a fifteen-mile radius of our homes and have been denied privileges by only two or three landowners.

Most hunters are usually exposed to wingshooting only during the regular hunting seasons and do not really get into the swing before the season is over. Trap and skeet shooters have an edge, but they are accustomed to breaking claybirds on predictable paths. Pigeon shooting is a great way to keep your senses and eyes trained all year. It is also helpful for youngsters and first time hunters who want to learn the basics of wingshooting. This sport is, in all respects, a wingshooter's delight.

## Outdoor Pennsylvania

Accompany a game protector as he tracks an elk, sneak up on a bull elk through a September morning mist, and get a bird's eye view of an elk herd from a helicopter as the elk herd is being censused in January. This month the Pennsylvania Public Television Network is broadcasting *Outdoor Pennsylvania*, an hour long television program produced by WPSX/University Park. In addition to the segment on Pennsylvania's elk herd, viewers will also see features on the state's osprey reintroduction program, the Erie National Wildlife Refuge, and the Susquehanna River as seen through the eyes of the captain of the Millersburg Ferry. Check local listings for the broadcast dates and times in your area.



He wasn't my first buck, or my biggest,  
but he meant the most because I got him . . .





I WANT TO tell you right up front that this is my first outdoor story. Hey, don't we all have a million of them floating around up there, just itching to be put into print? Anyone who spends even a little bit of time outdoors has a few stories worthy of any of the hunting mags we all devour each month. I've said for years, "Heck, I can write as good as that guy," but somehow the

of support as well. I am sure he left anyone who came to know him with a strong and genuine feeling of what sportsmanship, conservation and fair chase meant.

Dad spent most of his middle years hunting with a group of local men, but all of his early years and his last few were spent as a stillhunter. He was a captivating story teller, and his account

# DAD'S WAY

By Gary J. Williams

grass always needs mowing, or the car's oil needs to be changed, or I'd better do a little "OT" this month for the utility bills. On and on it goes and we never quite do get those yarns down on paper.

We're really a lot alike, you and I and the millions of other guys who spend all year waiting for the first Monday after Thanksgiving or one of the other first days that fly by faster and faster each year. Priorities must take their place, however, and who has the time (or the motivation) to sit down and write a whole bunch of words about that big 8-point (well, maybe he was only a nice 4) or the "boss" gobbler that almost came in range last spring? (How come they're always "boss" gobblers?)

Well, I found the motivation and I'm taking the time and if this story doesn't leave you feeling the way one of Jack O'Connor's or Peter Capstick's does, remember — it's my first.

From the title you can guess this is not so much a story about some spectacular trophy tracked down in a far off wilderness, but a story about my dad. Glendon Aloysius Williams, his birth certificate said, but he was just Glen to almost all who knew him, Gramps to his three grandchildren, and to just two very lucky people — Dad. Being born December 18, 1911, put him through an era when hunting and fishing was fun — and, just as important, a means

of tracking the "Heaters Hill buck" and shooting him in his bed, and his stories about Deep Hollow, the Big Swale, the Corduroy Road, and the Pond Eddy woods always had a special zest.

For my brother Glenn and me, being in the woods with Dad meant always testing the wind, using our eyes and ears as much as our feet, practicing patience (which we never had enough of and still don't) and the thousands of other rules a stillhunter must live by if he is to have any success at all. Although most of our early seasons were spent hunting gang style with our camp, there were always those few special days when the three of us would sneak off alone and do it Dad's way.

As Dad got older he reverted more and more to his old ways, leaving the gang and sneaking off alone or going with his best friend, Walt Percival. As I realize now, he probably did it for the memories as much as anything. When all else is considered, I guess that's all any of us really have, isn't it?

Somehow, when you're all alone, shadowing a ridge top or sneaking through some other old, familiar haunt, those cherished days of yesteryear seem a whole lot easier to recall and relive. Bygone friends smile and laugh again, special bucks and special places and special years all well up again, just as if nothing at all has changed.

But things do change and time does go on and the old man with the long white beard and scythe (as Dad always used to call him) finally caught up to my Dad and for a while smothered every mountain breeze and every spring sunrise and every beautiful snowfall we ever shared. But as hard as he was to lose, we all — friend and family alike — somehow realized how lucky we had been to have him in our lives; and I soon understood that people such as he was are never really gone from us if we have those memories.

So I returned to the woods, where he had at first carried me in a packbasket on his back, then walked with me, taught me, scolded me, helped me, and most of all loved me. I found that Dad was still there, where he'd always been, where fathers and sons have shared some of life's greatest secrets and greatest friendships, as long as there have been fathers and sons and wild places to be; and it led me on a cold, windy December morning to a spot under a large hemlock on a piece of property the state had recently acquired, where I waited for daylight to fill the woods.

As I sat there, alone except for my memories of Dad, I reviewed my plans for the day in this new and unfamiliar land. I'd sit for an hour or so, or until I became chilled, or at least until the

spirit moved me. Then I'd hunt in a random direction into or quartering the wind. I'd move only two or three steps at a time, stand, watch and *believe* a buck was almost in sight. Dad always said, "Son, you've got to believe he's there — and sooner or later he will be". I realized as soon as I started that the morning wasn't going to be a still-hunter's dream. It was too dry, too noisy, too clear. But getting a buck really wasn't all that important anyway. I was going to spend a day with Dad again, and that's what counted.

### The Feeling

Somehow I did feel different, though. You know the feeling. I knew something was going to happen. I barely covered a quarter of a mile in the first three hours of light on that bright, beautiful day. My feet somehow found all the quiet spots, and they didn't itch to carry me just up over the next rise, as was normal. No, today they had been content to step, stop, and wait while my gaze searched every tree, rock and bush for the telltale brown patch, the flicking ear, the horizontal back line of a poised whitetail. They waited this morning, while my ears strained to pick up every rustle of leaves, every creaking tree, every snapping twig. They waited while my nose filtered every crisp breeze, every wind change, while my brain analyzed every instinct relayed to it. I wasn't aware of it then, but I was a man possessed. A man possessed by his father's spirit, his knowledge, his very being. (Or was it a possession every hunter acquires, handed down from the men who trapped the Madison and the Yellowstone, who shot the buffalo, who stalked the wild turkeys for the first Thanksgiving feast; or the men whose only weapons were spears and crude arrows, from a time long forgotten by modern man?)

Then — snap! A slight movement to



HIS HEAD was up and cocked my way. I searched for that familiar spot we all know, just behind the shoulder, but found a branch splitting the horizontal center line of his body.

Subscribe to

## GAME NEWS

For a Friend . . .

my right front gave away the line of a deer's back. His head was up and cocked my way. The butt of my Ruger 7x57 nestled quickly and silently against my shoulder, the sunlight tattled on white antlers glistening in the brush. I searched for that familiar spot we all know, just behind the shoulder, but found a branch splitting the horizontal center line of his body. "Shoot!" my trigger finger screamed to my brain, but Dad calmly spoke from the deep recesses of my mind: "Make your first shot count, son, it'll probably be your best. Never chance crippling an animal." I relaxed, breathed deeply and waited.

The buck stepped forward. The crosshairs settled and the little Ruger bucked in my hands. The buck leaped out of sight around the edge of a swamp.

Silence—dead, eternal, deafening silence engulfed me. Only my heart pounded out its thunderous music in my ears. The empty casing on the ground was the only proof that the episode had really happened. I wanted to run over and claim my trophy. I had to have hit him, I thought. But why hadn't he fallen, how had he got out of my sight so soon?

"Relax, son, give him time to lie down," Dad whispered again.

I checked my watch; 9:45, it read. I decided thirty minutes would be my minimum wait before I'd begin the search. There had been other times that thirty minutes seemed interminable while Dad and I waited on some log to follow a wounded buck, or for a gobbler to close those last few steps needed to take him cleanly. But this day, as Dad and I silently reminisced about other trails and other times, the thirty minutes seemed to almost evaporate. I carefully approached the spot the buck had been, rifle ready, eyes searching for any telltale blood or hair, but my search revealed nothing. I started forward,

following the obvious runway traversing the edge of the swamp where the buck had disappeared.

Suddenly, I wanted this buck—I mean, really wanted him. Sure, we want every one we shoot at, but this one was different. This one was my final test, my final affirmation after oh so many trials and errors. He was my final graduation to the kind of hunter Dad had always tried to teach me to be, the kind of rifleman and sportsman Dad had passed on to me in blood and in action.

### My Heart Leaped

My heart leaped, it soared, it floated. There, lying just a short distance ahead, was the buck. The small 7mm bullet had neatly entered midline of the body, six inches behind the left shoulder and exited at the point of the opposite one, putting him down within 40 yards of where he had been hit. My knees began to tremble, my hands shook, my legs weakened under me as I stared down at his small but typical Pike County 5-points. I briefly thought of the cleaning job and the almost-two-mile drag back to the truck. But I knew those were small tasks—labors of love, Dad always called them.

Yes, I admit that a tremendous swell of pride filled me and seemed to stick in my throat as my eyes teared and my breathing became difficult. I knew, as I stared at the little buck, that he wasn't my first buck and he wasn't my biggest, but he'll always mean the most because I got him Dad's way.



# —NEEDED—

## Hunting License Fee Increase

By Peter S. Duncan  
Executive Director  
Pennsylvania Game Commission

**T**WELVE YEARS have elapsed since the Pennsylvania Game Commission last received legislative approval to raise resident hunting license fees. Our license revenue base has remained basically unchanged for well over a decade. In the meantime, operating overhead has increased dramatically, and in some categories costs have increased more than 500 percent. While other state agencies have enjoyed significant license increases, our operations were sustained through wise fiscal management and substantial reserves—reserves built up over the years from oil, gas and coal leases; timber sales; federal augmentations from Pittman-Robertson funds, and interest bearing accounts.

However, over the past two years we've depleted our capital reserves by \$7,500,000. By 1986 our reserves will be almost depleted, and unless increases

are approved for the 1985-86 license year, insufficient money will be available to sustain Commission operations. Without a substantial increase, the Commission will be forced to curtail programs and services; proposed new programs aimed at enhancing wildlife populations and outdoor recreational opportunities will be postponed or abandoned; and it's inevitable that some employees will be furloughed.

For ninety years, almost a century, the Game Commission has been fulfilling its primary obligation to provide lands for public hunting and wildlife populations yielding substantial annual harvests. The Game Commission is primarily a service agency providing commonwealth citizens with two intangible products—the opportunity to hunt and the opportunity to enjoy wildlife on a nonconsumptive basis.

**Table 1. Estimated Additional Revenues**

	Unit Price	Estimated Annual Sales	Increase	Additional Revenue
Adult Resident	\$15.00	981,000	\$ 7.00	\$ 6,867,000
Junior Resident	\$10.00	145,000	\$ 5.00	\$ 725,000
Senior Resident	\$10.00	69,000	\$ 5.00	\$ 345,000
Archery	\$ 6.50	275,000	\$ 4.50	\$ 1,237,000
Muzzleloader	\$ 6.50	80,000	\$ 3.50	\$ 280,000
Antlerless Deer	\$ 6.50	400,000	\$ 3.50	\$ 1,400,000
Bear Resident	\$10.00	98,700	\$ 5.00	\$ 493,500
Bear Non-Resident	\$25.00	1,300	\$10.00	\$ 13,000
Non-Resident	\$85.00	62,000	\$25.00	\$ 1,550,000
Jr. Non-Resident	\$40.00	4,000	\$40.00	\$ 160,000
5 Day Non-Resident*	\$15.00	10,000	\$15.00	\$ 150,000
Adult Furtaker	\$15.00	100,000	\$15.00	\$ 1,500,000
Junior Furtaker	\$ 4.00	14,800	\$ 4.00	\$ 59,200
Senior Furtaker	\$10.00	6,900	\$10.00	\$ 69,000
			Total	\$14,848,700

\*Five day nonresident license for small game only and would not include turkeys.

At \$15 annually, we are asking Pennsylvania hunters to *invest four cents a day* to help finance the Commonwealth's wildlife management program.

The Game Commission today is facing a financial crisis in which the very survival of the agency's programs and services is at stake. Hunting is not only important to the economy of the state, but also is of utmost importance to sportsmen and outdoor enthusiasts concerned with the future of Pennsylvania's wildlife management program.

Although a part of state government, the Commission itself is self-supporting. It does not, and cannot, draw money from general appropriations. It cannot borrow money or obtain loans. It cannot arrange for, or receive, deficit appropriations. We must work on a cash basis, and therein lies the problem.

amount needed to carry the agency through fiscal 1989-90, based on an annual inflation rate of 8 percent. The figures below outline our general objectives. While not etched in stone, they show the direction we hope to take. Any lesser amount would require that we seek additional license increases prior to 1990. That would interfere with long term planning, and we would lack a sense of direction if forced to return to the Legislature for increases every two or three years.

Estimated additional revenues generated by the proposed unit price increases are listed in Table 1.

The question is often asked: How do

**Table 2. Resident Fee Comparison**

State	Underlined Species	Archery	Muzzeloader	Totals
Colorado	\$47.00	\$17.00	\$17.00	\$81.00
New Jersey	\$44.50	\$19.75	N/A	\$64.25
Illinois	\$48.00	\$15.00	N/A	\$63.00
New Mexico	\$53.50	N/A	N/A	\$53.50
Michigan	\$43.25	\$ 8.75	N/A	\$52.00
Minnesota	\$38.50	\$12.75	N/A	\$51.25
Missouri	\$38.00	\$ 8.00	N/A	\$46.00
Ohio	\$29.50	\$ 7.75	\$ 7.75	\$44.75
Wyoming	\$38.00	\$ 5.00	N/A	\$43.00
New York	\$25.50	\$ 5.25	\$ 5.25	\$36.00
New Hampshire	\$17.25	\$ 8.00	\$ 7.00	\$32.25
South Dakota	\$32.00	N/A	N/A	\$32.00
North Carolina	\$22.00	\$ 6.00	N/A	\$28.00
Georgia	\$17.75	\$ 3.25	N/A	\$21.00
Maryland	\$15.50	\$ 1.25	\$ 1.25	\$18.00
Virginia	\$17.00	N/A	N/A	\$17.00
Pennsylvania	\$ 8.50	\$ 2.50	\$ 3.50	\$14.50
West Virginia	\$ 8.00	N/A	N/A	\$ 8.00
Delaware	\$ 5.20	N/A	N/A	\$ 5.20

To reiterate, by summer of 1986 our unreserved fund balance will be under \$6 million. No significant license revenues are received from April through September; not until October do we realize revenues from a new license year. Therefore, from July through October there will be insufficient funds to meet our obligations, commitments and payrolls.

In January, when a new session of the General Assembly convened, the Commission began seeking legislation authorizing approximately \$14,800,000 in new license revenues. That's the

Pennsylvania's resident fees compare to those of other states with similar huntable resources? That's difficult to equate because license structures differ and many agencies are subsidized from general appropriations (tax revenues); however, the examples in Table 2 compare costs associated with hunting *upland and small game, deer, and migratory game birds, and hunting and trapping furbearers*. Most states with huntable bear populations have separate licenses not reflected in this analysis. The average cost of a bear license is \$10.50.

**Table 3. Salary-Benefits Comparisons**

Title	1973 Salary-Benefits @ 16.5%	1984 Salary-Benefits @ 39.5%	% Increase
Bureau Director	\$18,725 + \$ 3,089	\$30,533 + \$12,060	95%
HE Coordinator	\$12,675 + \$ 2,091	\$21,477 + \$ 8,483	103%
Info Writer II	\$10,954 + \$ 1,807	\$18,875 + \$ 7,455	106%
Game Protector	\$ 9,946 + \$ 1,641	\$20,530 + \$ 8,109	133%
Forester I	\$10,080 + \$ 1,663	\$19,257 + \$ 7,606	129%
Laborer	\$ 6,963 + \$ 1,149	\$13,280 + \$ 5,250	129%
Labor Foreman	\$ 7,628 + \$ 1,259	\$14,188 + \$ 5,604	123%
Clerk-Typist I	\$ 6,963 + \$ 1,149	\$12,460 + \$ 4,922	114%
Clerk-Steno III	\$ 9,604 + \$ 1,584	\$16,567 + \$ 6,544	107%

This analysis reflects information gathered from the revised *1980 National Survey of Fishing, Hunting and Wildlife Associated Recreation*, and from questionnaires returned from selected resources agencies. At this time, several states in the comparison have license in-

industry, even families and individuals. All have been affected by high costs of doing business—costs of living and surviving in an economy wracked by more than a decade of double digit inflation. Let's examine how inflation has impacted upon the Game Commission

**Table 4. General Cost Comparisons**

Line Item	1973-74	1983-84	Increase
Game Land Acquisitions	\$1,156,715	\$3,745,080	224%
Vehicle Purchases	\$ 314,258	\$ 643,873	105%
Automotive Supplies & Repairs	\$ 525,056	\$1,142,615	118%
Printing & Advertising	\$ 616,560	\$1,113,364	81%
Agricultural Machinery	\$ 54,890	\$ 288,218	425%
Building Rentals	\$ 21,411	\$ 290,434	1256%
Uniforms—PGC Personnel	\$ 34,064	\$ 206,148	505%
Postage	\$ 140,666	\$ 389,269	177%
Pheasant Feed	\$ 355,109	\$ 546,517	54%
Heating, Power & Light	\$ 96,435	\$ 323,414	235%
Educational Supplies	\$ 42,888	\$ 156,299	264%
Bear Damage—Deer Proof Fence	\$ 13,077	\$ 53,821	312%
Telephone Service	\$ 128,181	\$ 339,248	165%
Habitat: Seedlings & Plantings	\$ 50,495	\$ 296,303	487%
Radio Equipment & Maintenance	\$ 45,234	\$ 364,210	705%

creases pending before their legislatures.

The Pennsylvania Game Commission's financial problem, although critical, is not dissimilar to those of other state and federal agencies, business and

since our last license increase back in 1973. First—a salary and benefits comparison. (See Table 3.)

Annual payrolls for salaries, wages, and fringe benefits, over the past ten

**Table 5. Individual Cost Comparisons**

Item			
Gasoline (per gallon)	\$ .24	\$ .91	279%
Sedan	\$2,727	\$ 8,548	213%
Four Wheel Drive Vehicle	\$3,511	\$10,913	211%
Farm Tractor	\$5,337	\$13,502	152%
16mm Motion Picture Projector	\$ 525	\$ 1,118	113%
Ektachrome Film (Master Carton)	\$ 516	\$ 1,083	110%
20 Min. Hunter Education Film	\$ 115	\$ 345	200%



years, have increased from \$8,969,268 in 1973-74 to \$19,714,694 in 1983-84. The 1984-85, payroll will exceed \$20,360,000 — approximately \$1,500,000 a month.

That's even more significant considering the agency *personnel complement has been reduced* from 719 employees in 1973, to 681 in 1984.

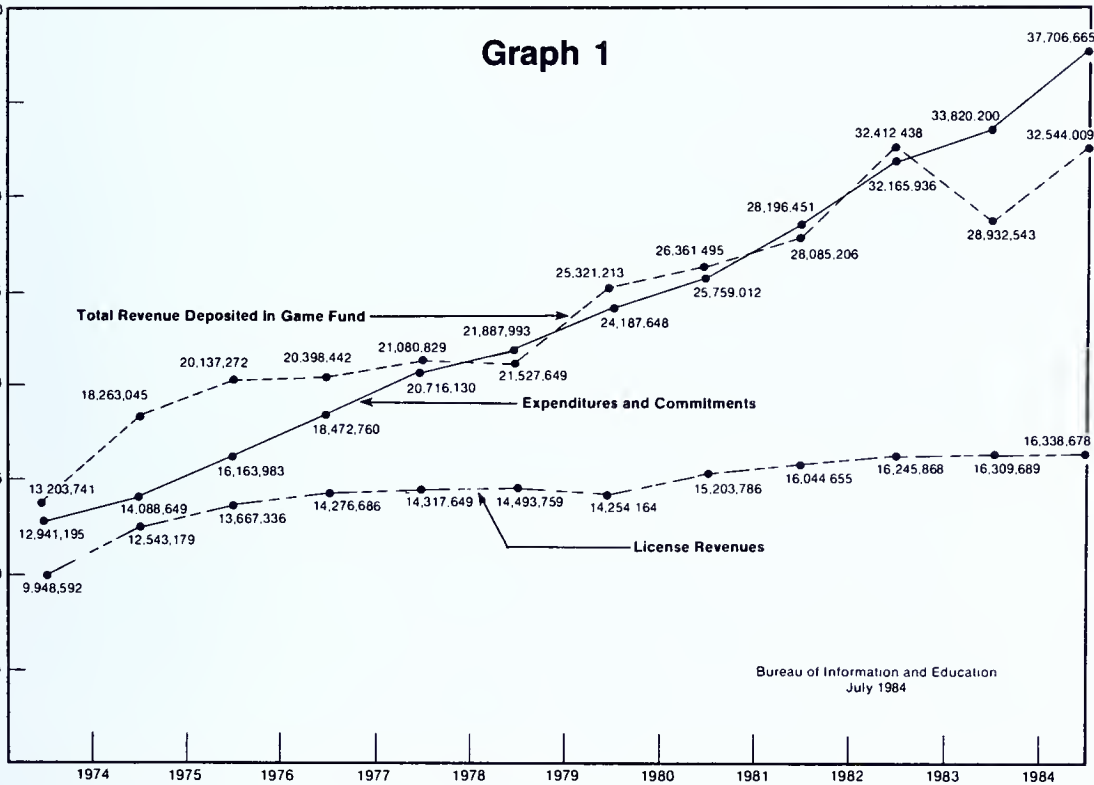
While personnel costs have more than doubled in the past eleven years, other agency expenditures and commitments have also continued to escalate. (See Tables 4 and 5.)

The nearby graphs demonstrate the impact of inflation and declining revenues on agency operations.

mitments exceeded revenue collected by \$4,887,657.

Anticipating further decline in total revenues, and a \$4,900,000 commitment for the new headquarters, training school and warehousing facility, budgetary restraints were initiated (cut-backs in programs and services) and more than \$3,000,000 was trimmed from the 1983-84 operating budget. That notwithstanding, in 1983-84 expenditures and commitments again exceeded revenues by \$4,991,829.

Although license revenues have increased slightly for the past eleven years, the percentage of increase is minimal, and far below that for expenditures



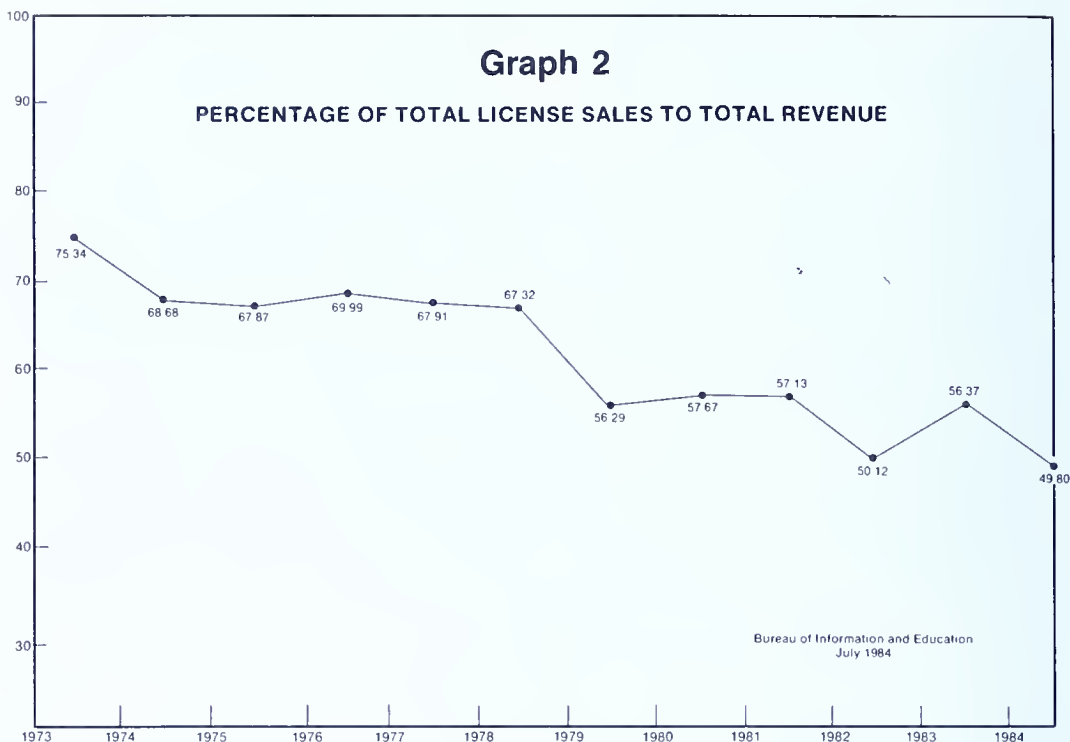
Graph Number 1

and commitments. (See Graph 1.)

Total Revenue Deposited in the Game Fund (all revenues generated from license sales; oil and gas leases; timber sales; fines, Pittman-Robertson funds; sales of GAME NEWS and other paid publications; stamps and prints; permits; etc.) either exceeded or kept pace with expenditures and commitments through fiscal 1981-82. During fiscal 1982-83, expenditures and com-

Graph Number 2

In the fiscal year ending June 30, 1973, note that license revenues accounted for about 75 percent of all monies deposited in the Game Fund. Six years later, on June 30, 1979, license revenues accounted for only 56 percent — and on June 30, 1984 — slightly less than 50 percent.



### Graph Number 3

In the fiscal year ending June 30, 1973, license revenues financed about 77 percent of expenditures and commitments. Six years later, on June 30, 1979, license revenues provided only 59 percent—and on June 30, 1984—just 43 percent of all agency expenditures and commitments.

### Graph Number 4

This graph illustrates what has happened to our unreserved fund balance during the past eleven years. From a low of \$4,880,904 at the end of fiscal 1972-73, the fund climbed to a comfortable \$22,282,454 during fiscal 1981-82. Then as total revenues plunged and total expenditures and commitments increased, the fund was depleted by \$7,361,368 in just two years. Without substantial license increases, projections show the fund at slightly more than \$11.5 million on June 30, 1985, and at about \$5.9 million on June 30, 1986.

### New Projects

Assuming the Pennsylvania Legis-

lature approves license increases providing additional annual revenues of \$14,800,000, other than maintaining wildlife management programs and services at their present level, what new programs and landowner incentives are planned for 1986? What projects can we initiate to create new habitat and enhance wildlife populations?

Today, Pennsylvania ranks thirty-third in size of all the nation's fifty states. This fact, coupled with the fourth largest population, 11.8 million people, leads even the casual observer to see the recreational demands of so many people on such a small state can be very complex.

Existing State Game Lands comprise only 4 percent of the total land area. Many types of public recreational interests and increases in leisure time make pressures on these public lands significant.

In order to alleviate some of these pressures, it will be necessary to continue obtaining access to private lands whose owners allow responsible individuals to pursue their hunting persuasions.

The Game Commission's existing

Cooperative Public Access Program boasts over 30,000 cooperators providing access to over 4½ million acres. These tracts are scattered across 65 counties. The task of providing cooperators with adequate incentives to keep their land open to public access can be cumbersome, in that all are of varied backgrounds.

Certainly, the absentee landowner, with few agricultural areas on his property, will not expect as much as the farmer whose very livelihood depends on the property he manages. It then becomes reasonable to assume new incentives must be of a nature to not only keep existing cooperators enrolled in the program, but they must also provide additional incentives attractive enough to entice potential new co-operators into enrolling their land, and then keeping it enrolled.

With that in mind, the following six projects are outlined as practical and fundable with additional monies provided by proposed new license revenues:

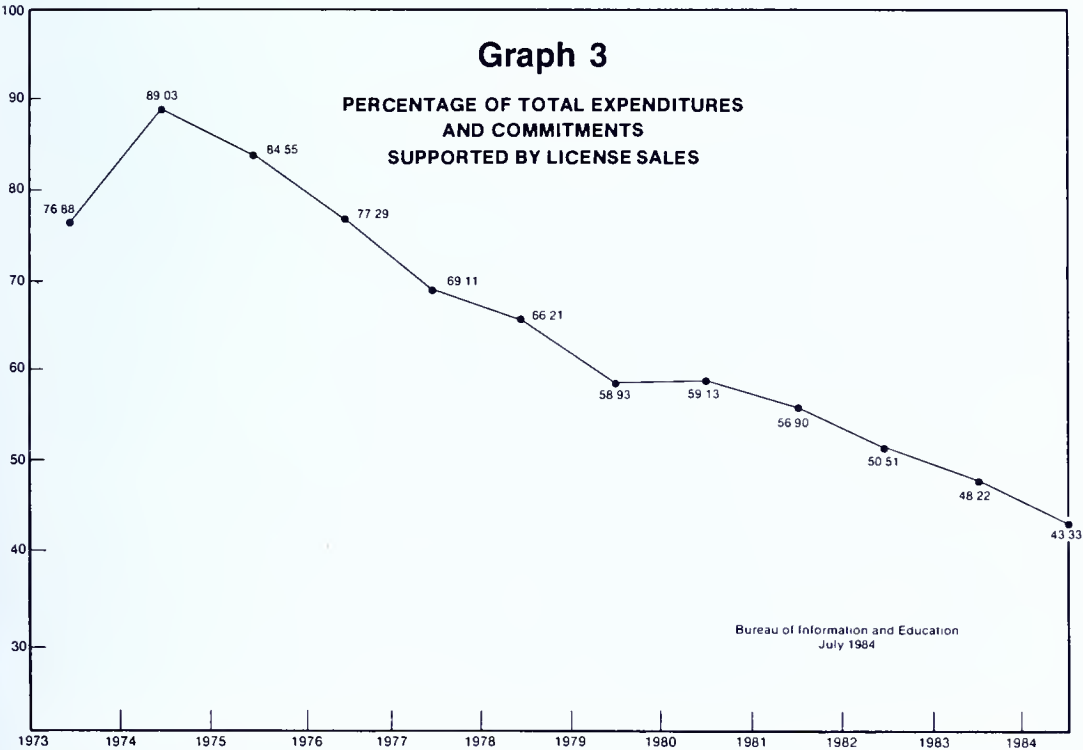


**Seed Packet Program**

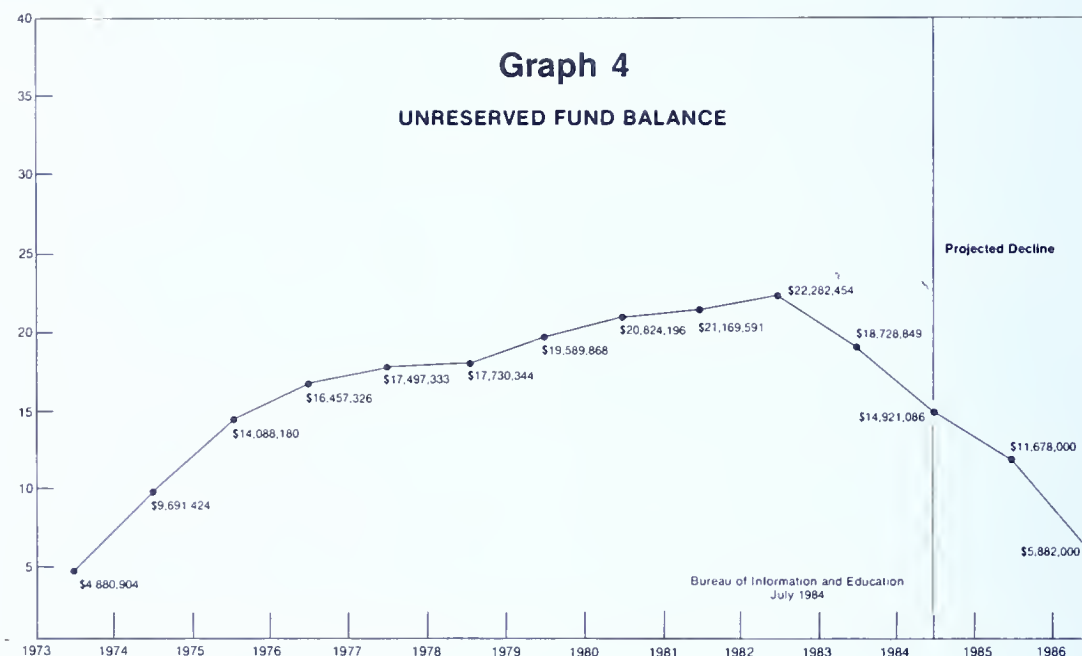
*Objective:* To distribute 35,000 10-pound bags of seed mix to provide annual food and cover for small mammal and bird species in small, scattered plots across agricultural type habitat.

**Border Cutting for Wildlife  
Habitat Improvement**

*Objective:* To annually cut 1,200 acres of borders around agricultural fields to provide a diversity of wildlife







cover and to provide for increased mast production by those species left standing in the border strip.

### **H.E.L.P. – Habitat Enhancement Landowner Program**

*Objective:* To obtain for a period of six years term conservation easements on 45,000 acres of private land which provides suitable wildlife habitat and which may be in danger of being removed or overgrazed or just thoughtlessly destroyed.

### **Pheasant Recovery Program**

*Objective:* To annually provide 6,000 acres of hayland in prime pheasant habitat to allow for the successful hatching of pheasant nests by delaying mowing until after June 25.

### **Seedling Planting Program**

*Objective:* To plant 1,000,000 trees

and shrubs annually from the PGC Howard Nursery on land enrolled in the Cooperative Public Access Program.

### **Rabbit Trap and Transfer Program**

*Objective:* To trap and transfer 60,000 rabbits from urban or municipal environments to suitable habitat in rural areas.

The time has come for the Game Commission to adjust hunting license fees to meet today's needs. While nobody likes price increases, Pennsylvania sportsmen must surely realize that it's impossible to conduct business in the 1980s under economic guidelines designed for the 1970s. All those who have an interest in the state's wildlife resources should support the agency's attempt to have hunting license fees raised. The future of hunting and the state's wildlife depends on it.



# The Wrong Way to Hunt Bear

By Kirk J. Zucal

**D**AWN WAS still at least an hour and a half away when I climbed into my truck and headed out of Wind Gap for the big woods bear country of Pike county. I thought I'd be hunting alone that day. When I neared my hunt area, a lone figure standing in the middle of the road flagged me down with a flashlight. It was Jim Wilson, long-time hunting partner and closest friend. I pulled off the road and jumped out of the truck.

"Ho, there, might hunter," Jim said.

"How'd you know it was me?" I asked.

"Oughta get that muffler fixed," he said.

"Where we gonna hunt?" I asked, shouldering my rifle.

"About four miles in. Loaded with bear."

It was too late to argue. Jim was

already jumping down the first set of ridges that would prove to be a real trial on the way out. We half-walked, half-jogged to his pristine bear paradise. Jim has a knack for finding the greatest hunting spots before the season and then making up the greatest excuses for why they didn't produce once the season rolled around. Still, I kept up the pace he was setting. Maybe, just maybe, this time he would be right. The light was increasing fast so Jim quickened the pace. My day pack and Thermos, rifle and extra clip, and heavy hunting clothes and boots were not my idea of jogging attire. Jogging was what Jim had us doing by the time we reached the stand he'd picked out especially for me.

"You want me to climb up there?"

"You got the whole ridge on your right and the swamp on your left," he said.



**FULL LIGHT** was not long in coming. I sat patiently for two hours. Then the wind picked up. Fifteen feet up a tree is no place to find warmth on a windy November morning.

wandered around less than 40 yards away. He said he'd have the pick of the bunch come buck season. I bet against it; I won. I told Jim I was tired of sitting.

"Cold?" he asked.

I picked little icicles from my eyelashes and asked, "Why should I be cold?"

Jim handed me his rifle with blue fingers and descended. We decided to walk around the area and find out where all the bears were hiding. Our walk took us still deeper into the woods. After about two hours we took a rest; it was time to discuss some new bear hunting strategy. Jim wanted to hunt the next ridge deeper in; I wanted to hunt closer to the truck. Jim won. We started up the new ridge. When we got to the top, we both admitted we didn't know where we were.

"There should be a marker around here somewhere," Jim said.

"C'mon," I said.

### Right or Wrong

I'd never been in those woods before, but I figured we'd better head in some direction, right or wrong. The ridge was topped with a long narrow patch of tight scrub oaks. It was my idea to hunt bear like pheasants. I told Jim to get on the far side of the scrubs and walk along as I did. Just before he left, he bet there was a bear within a quarter-mile of us. I said there wasn't. I lost.

About a hundred yards later Jim gave a low whistle. He pointed behind me; I turned in time to see a 6-point buck bounding down the slope behind me while Jim forged on. As I tried to catch up with him, I heard a second deer crashing through the scrubs in my direction. I went up on my toes to look at it. It was no deer. Whatever it was, it was big, fast, and closing in on me.

I threw up my gun and readied my-

"The first branch is fifteen feet up!"  
"Gimme your gun; I'll give you a boost."

I climbed. Like a squirrel I climbed. The branch was pretty big so I wasn't too uncomfortable. Jim asked if I was all right. I lied; I said I was. That done, he trotted off to his stand.

Full light was not long in coming. I sat patiently for two hours. Then the wind picked up. Fifteen feet up a tree is no place to find warmth on a windy November morning. I soon lost all the warmth I'd brought up the tree with me. My Thermos was on the ground; Jim said I couldn't drop it that way. After another thirty minutes of self-imposed torture, thought of the hot coffee five yards below me was too much to resist. I unloaded my rifle, lowered it carefully, then lowered myself twice as carefully.

I went searching for Jim and found him up a tree that was the Taj Mahal compared to my bear stand. He stared down at me with glazed eyeballs. Of course, he'd seen seven of the biggest bucks he'd ever laid eyes on. Not one was under 7 points, and they'd all



self for some fast shooting. I first saw black at about 12 yards. By the time it registered in my brain that a bear was barreling at my tender young body, the distance was down to 8 yards. I shot and the big animal veered to my left. Two more shots and the bear piled up only 4 yards away. As I turned to yell to Jim, the bear got up again. Three more quick shots put him down for keeps.

Then, a second animal came crashing toward me through the scrubs. It was Jim. He had lost his hat, ripped his jacket, and ruined the finish on his rifle, but never noticed. "What happened! Where'd he go!"

I'm not known for my fantastic marksmanship; he thought I'd missed.

"He's right here!" I screamed.

"I thought you fell and your gun went off!"

"Six times?"

"You are pretty clumsy sometimes."

Then, "I told you they were in here!"

"Now I believe you!"

We celebrated for half an hour and then realized we were five miles from the truck. Four hours later, exhausted, we gave up.

Jim had been staying at a cabin with his family and some friends. Among them were five ambitious young men who, Jim said, would be glad to drag my prize out of the woods.

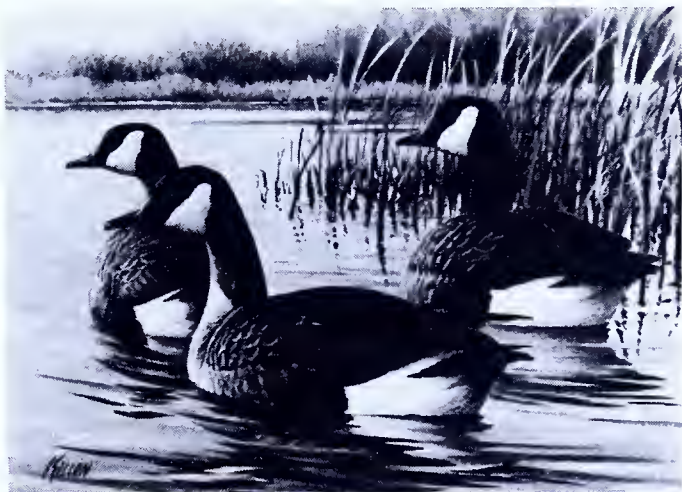
Only forty-five minutes after he left, Jim was back with a squadron of able-



**I FIRST** saw black at 12 yards. At 8 yards I shot and the bear veered to my left. Two more shots and the bear piled up only 4 yards away.

bodied bear draggers. In a few minutes, we were out of the woods and on our way to a hot meal and a well deserved celebration.

We showed the bear off for two days. When we finally set about skinning it, we learned our last lesson in how not to hunt bears. There were only two holes in the carcass, one in the neck and one in the shoulder. It takes a determined effort to miss a point-blank bear four shots out of a gun full and still get off two winners.



Pennsylvania's second annual waterfowl stamp, by James H. Killen, is available in full color from the Game Commission's Harrisburg office, regional field offices, the Pymatuning and Middle Creek Wildlife Management Areas, and selected hunting license issuing agents. Price is \$5.50 delivered, and purchase is strictly voluntary. Income from sales will provide funding for wetlands and habitat and assist in financing wildlife management programs.





# Of White Men and Wildlife

By Tom Eveland

**"M**ANY MEN have been overtaken by night at a distance from home, and sometimes only a short distance, and been forced to climb trees to get out of the reach of wolves and sit there all night," says Henry B. Plumb of Colonial Pennsylvania. Often stout-hearted pioneer women, snowed in for several months, listened to the screams of panthers and the howls of wolves during the long winter nights.

Every farmer hunted and trapped. These activities helped tie him closely to his environment. Wildlife provided clothing and food along with furs and pelfries his family could use for barter. In 1804, wholesale prices of animal pelts were: deer, 75 cents to \$1; bears, \$1 to \$3.50; beaver, \$1 to \$2.50; otter, \$1.50 to \$4; red fox, \$1 to \$1.10; mink, 20 to 40 cents; muskrat, 25 to 30 cents.

The whites explored, built farms, and established towns and cities. State by state they systematically adjusted the forests, fields and wildlife to fit their lifestyles. And although they affected each and every state, some negatively and some positively, the state probably affected most was Pennsylvania. This state's incredibly diverse pristine ecosystems were for the most part destroyed or dramatically altered in only a few hundred years, resulting in the disappearance of many species and the introductions of many more. But one thing is sure, from the mid 1600s to the early 1900s, absolutely no Pennsylvania wildlife species went unaffected.

The first major changes to affect the commonwealth's wildlife took place with the establishment of small rural farms across the state, from the mid 1600s to the late 1700s. During this time much land was opened for crop fields, which resulted in the creation of a field/

forest habitat. This was, and still is, very good habitat for many animals, including whitetails.

"We have brought home to our house by the Indians seven or eight fat bucks in a day, and sometimes put by as many, having no occasion for them," wrote Mahlon Stacy of Bucks County to a friend in England sometime in the early 1700s. Pioneer farmers included venison as a staple article of their families' diets, and harness, rope, thongs, and clothing were made from the skins. Deer were so plentiful by the 1750s that they were considered a nuisance because of crop damage. No farmer was without a good supply of fresh venison.

## Bear Meat Superior

These early farmers considered bear meat superior to venison because it was juicier and could be preserved for winter use by pickling. Bears were taken mostly with dogs, but steel traps and log pens took their share. Besides the meat, settlers needed bears because a large amount of oil which was used for cooking and lighting the cabin could be taken from the fat.

Elk meat was another staple to the early pioneer. Pennsylvania's greatest concentrations of these animals occurred in the northeastern Pocono region and the mountainous central areas. But the elk did not fare as well as the deer, and by the late 1700s were already showing signs of persecution. Thousands were slaughtered without thought of the future, some merely for the hide and the two upper canine teeth, which were considered good luck and taken for souvenirs.

During the early 1800s, elk were eliminated from most of the state. The





last stronghold for this species was a section of land between the headwaters of Bennetts Branch of the Susquehanna and the Clarion River to the west and north. This last stronghold was named Elk County in 1843, in honor of this last herd. Over the next twenty years the elk were slowly reduced in number. Then, in November of 1867, Jim Jacobs, who, ironically, was a full-blooded Indian, supposedly killed the last native Pennsylvania elk.

From Lake Erie southward through the Susquehanna Valley roamed herds of buffalo. During the autumn of 1773, a herd of 12,000 was reported along the west branch of the Susquehanna River on their annual fall migration. Hunters posed themselves along deeply worn buffalo trails and killed them by the hundreds. Thomas Ashe wrote in 1806, "One of the first settlers in this country built his log house on the immediate borders of a salt spring. He informed me that for several seasons the buffaloes paid him their visits with the utmost regularity . . . At that point he supposed there could have been not less than ten thousand in the neighborhood of the spring . . . in the first and second years this old man with some companions killed six to seven hundred of these

noble creatures, merely for the sake of their skins, which to them were worth only two shillings each."

By the early 1800s only a few survived. One of the last was killed near Capital Hill, Harrisburg, in 1792. Today some of the state's main highways are built along old buffalo trails, and places with names like Buffalo Run and Buffalo Valley commemorate the great thundering herds.

Besides elk, deer, and buffalo, one other large-hoofed creature walked the Keystone State. It is believed that moose inhabited the swamps and bogs of the northeastern Pocono and northwestern Erie regions. They were never abundant and probably a rare sight for a pioneer. Sometime in the 1780s a huge moose was killed by a tavern owner's dogs near the town of Wind Gap. The antlers of this huge bull were reported to span 78½ inches, almost equaling the greatest spread in the current Boone & Crockett book.

Wolves were probably the most destructive animal in pioneer days. Early farmers suffered heavy livestock losses, especially of sheep and calves. In 1682, the Swedish Court of Chester enacted, "If any person . . . shall kill a dog-wolf he shall have ten shillings; and if a bitch-wolf, fifteen shillings, if slain by a white man; if by an Indian, five shillings and the skin for his pains." Even with these heavy bounties, wolves continued to wreak havoc with farmers until 1705. That year a law was passed providing that anyone who became a professional wolf-killer by agreeing to devote at least three days a week to hunting, and who registered with the county court, would be paid a bounty of twenty-five shillings a head. The bounty was changed in 1724 to seven shillings and six pence for every wolf-puppy, and fifteen for every dog or bitch wolf, to be paid from county funds.

Wolves slowly disappeared during the next hundred years, along with the once numerous mountain lions. Bounties and a growing human population were having noticeable effects. Then in



1840, the General Assembly passed "An Act to Encourage more effectively the Destruction of Wolves and Panthers in the counties of Luzerne, Susquehanna, Wayne, Pike, Jefferson, McKean, Tioga, Potter, Bradford, and Monroe." The bounty on a full grown wolf was \$25; on a wolf puppy; \$12.50; on a full grown panther, \$16; on a young panther, \$9. These large bounties did the trick. The last wolf bounties were paid in 1890 from Potter County, and the last cougar bounty was paid in 1863, from Warren County.

Colonial Pennsylvania's forest held ample supplies of birds also. Turkeys and ruffed grouse were plentiful, but possibly no bird on earth matched the great quantities of passenger pigeons that could be found in the Keystone forest. One eyewitness wrote, "They flew over Philadelphia in flocks which obscured the sun for two or three hours and were killed by hundreds of people using sticks on the tops of homes." Another person relating his experience at Carlisle about 1770 said, "I caught fourteen dozen at one time in nets. As many as a man could carry home were sold for a penny. Every farmer kept a tamed wild pigeon in a cage at the door, to be used at any time to decoy the wild ones as they approached."

The last great flight of pigeons was recorded over Lancaster County in the spring of 1846. "The dense mass of pigeons extended to the eastern horizon and as far north and south as the eye could reach," it was said, "and was continuous from about 12:30 to 4:30 p.m."

The seemingly inexhaustible supply of pigeons was decimated by wholesale slaughter, mostly by market hunters, the disappearance of nesting habitat, and possibly other factors. In May 1851, it was reported in the *Elk Advocate*, "The American Express Company carried in one day over the New York and Erie Railroad over seven tons of pigeons to the New York market." It is believed the last passenger pigeon died in 1914 in the Cincinnati Zoological Garden. The species is now extinct.

### Squirrels Were Abundant

As might be expected, squirrels were such an abundant mammal throughout Pennsylvania that they were soon considered nuisances among the state's early farmers. When the forest mast crops of nuts and berries failed, they would travel in huge waves, migrating to new food areas. In 1796, it was reported, "During last week several hundred squirrels per day crossed the Susquehanna from Cumberland County to Dauphin County. Some of the inhabitants who live near the banks of the river have been enabled to salt barrels of them for winter use." The General Assembly, in 1749, authorized counties to pay three pence a head, and in only one year 640,000 bushytails were turned in. This caused two new problems, though; one, it exhausted local treasures and, two, farm laborers left their low-paying jobs to become professional squirrel hunters, leaving farmers with no help. So the bounty was reduced to one and a half pence per





scalp. Finally, by the late 1800s, squirrel populations were at such low numbers it was believed they might even become extinct.

It is evident that Pennsylvania pioneers experienced times of plenty as well as times of famine. The 1700s were clearly a wild and exciting time to be alive, but from the mid-1800s to the beginning of this century, wildlife suffered immeasurable losses. During this latter period Pennsylvania lost its great flocks of passenger pigeons, its huge squirrel migrations, its wolf packs and mountain lions. Beavers had disappeared before the turn of the 19th century, along with the moose and buffalo. The magnificent elk vanished by the 1860s, and deer, turkeys, and virtually all game species were scarce by the turn of the 20th century. Every species had suffered from uncontrolled market hunting and the severe and rapid change in habitat which resulted from opening the land to farming and logging. Things couldn't have looked worse when the Pennsylvania Game Commission was created in 1895.

The Game Commission first enforced laws preventing the use of dogs, snares, and gun traps for taking deer. They

also, during the early 1900s, acquired deer from Michigan, New Hampshire, New Jersey, Ohio, Maine, North Carolina, Kentucky, and local Pennsylvania breeders for restocking. Hunting was regulated by seasons and bag limits. That the Commission did its job well is indicated by the figures tabulated over the years. In 1915, the first year for which data are available, 1287 legal antlered deer were reported taken. There was no season on antlerless deer that year. Twenty-five years later, in 1940, Pennsylvania had its biggest reported harvest, 40,995 bucks and 145,580 antlerless deer, for a total of 186,575.

The Game Commission also imported elk from Wyoming and South Dakota, and bought a few from a private preserve in Pike County shortly after the turn of the 20th century. Short hunting seasons were allowed from 1923 until 1931. Today the herd is protected.

In the summer of 1917, a pair of beavers from the state of Wisconsin were released in Cameron County. In the 1920s more were introduced from Algonquin Park, Canada, and from New York. Today the beaver has rebounded well and is even considered a nuisance in some areas.

Turkey and grouse populations have also returned, and the Commission brought in a newcomer early this century, the ring-necked pheasant. Today we see Pennsylvania as providing some of the best hunting in the country. It's ranked second in total deer production, and also provides excellent bear hunting. Turkey, grouse, and pheasant hunting occur across the state, and the quick-darting mourning dove has managed to replace the passenger pigeon.

It has been a long uphill climb. But, research, management practices, good forest stabilization, and adequate laws have finally begun to mesh.

The white man's arrival brought many changes to the state's wildlife—some good, some bad—but the enactment of sound management practices has made Pennsylvania again one of our richest wildlife states.





# A Look at Trapping

By Joe Kosack

SINCE THE days of William Penn, trapping has existed in his woods. Although the reasons for and the quarries have changed since then, thousands of Pennsylvanians still pursue this sport.

It's hard to imagine that, in years before, our forefathers pursued majestic predators now common only in the remote reaches of other states and the northern wilderness. Yet, right here in Pennsylvania, our ancestors sought magnificent creatures like wolves, mountain lions and bobcats. But fear of these dangerous-looking mammals, and the damage they could cause to livestock, sent many a pioneer hunter and trapper to the woods in an extermination effort generated by governmental bounties and public outcry.

Trapping and its concepts have changed since then. Today, trapping is a necessary tool for management of

the state's furbearer populations. Why? Let's consider, if you will, what Penn's Woods were like before the colonists arrived. For each lesser animal, there was a predator to control its populations through predation. Even the larger predators were pursued by Indians. Every creature that inhabited the land was part of an intricate system of checks and balances. Then along came the settlers.

The people neither knew nor cared anything about wildlife management. They wished to inhabit the deeper sections of the land but feared the larger predators that were monarchs of the wilderness. Man chased, trapped and hunted such animals until they disappeared in the late 1800s. The problem though, which wasn't recognized until later, was that as those people made life comfortable for themselves,



**WHAT** was once hunted and controlled by the majestic predators would now have to be controlled through the efforts of man.

they created a gaping hole in nature's system of checks and balances. What was once hunted and controlled by the majestic predators would now have to be controlled through the efforts of man.

Thus the modern trapper fills the void left by the absence of predators. His role is critical to the preservation of all furbearers in the state. His harvest of excess is equivalent to that which was once taken by the larger predators.

Animals will not live in harmony with one another in a limited amount of habitat. They cannot be stockpiled as if they were commodities in a warehouse. They're always struggling for food, habitat and denning areas in a world that seems to be shrinking on them constantly.

Furbearers, just like humans, need food and shelter to survive. When an area is host to an overabundant population of furbearers, the food supply and denning sites dwindle. These animals are then forced out of their chosen environment in their never-ending quest for the necessities of life. Soon they are attracted to urban and rural dwellings. Raccoons raid trash cans. Skunks and opossums prowl the backyards for tasty treats left over from recent picnics. Beavers and muskrats invade irrigation dams and town watersheds, polluting the water and weakening the breastworks. The situation poses countless problems to the human population;

problems that can be rectified only by the trapper.

How does wildlife benefit from the trapper?

The trapper could be considered the prevalent predator otherwise absent from our current ecosystems. The trapper harvests the excess furbearers in a given area so the food chain can support the remaining population through the winter. He also reduces the occurrence of disease which thrives when animal populations are at their peak. If the trapper didn't harvest these excess furbearers, nature would, but its means of removal aren't as humane as those of the trapper.

Nature uses disease and starvation to lower high populations of furbearing animals. But it would be a waste of a natural resource to allow that inevitable process to eliminate that which we could prosper from. So rather than letting our fur resource waste on the land, trappers enter the wild just before cold weather begins to take its toll.

The carrying capacity of any given area dictates that only a certain number of furbearers will have enough food and shelter to survive in this area during the most critical time of the year (summer drought or winter). Some animals will move, but most will stay to fight the timeless battle dubbed "survival of the fittest."

When the trapper enters the woods and fields in late fall, the struggle for life has already begun. But he puts an end to the clash for food and shelter. Within the course of the trapping season, a trapper will reduce the excess population of furbearers so the severity of winter and nature pose no threat to the remaining stable population.

Ofttimes you will hear of exorbitant sums of money that trappers reap when they sell their furs, but in reality many trappers are lucky to break even on their trapping endeavors. People are

quick to forget about the costs involved when an individual sets out a trapline. These expenses include equipment, gas and bait costs, and other miscellaneous expenditures. Financially, when a trapper sets out on the opening day of the harvest season, he starts in the hole. His first hope is to recoup his initial and operating costs.

It would be unfair not to consider the time and effort that a trapper puts into his trapline to make it successful. Endless hours of hard work are necessary for a profitable trapline. Rising in the early morning, regardless of the weather, the trapper sets out to check his traps. He knows the longer he waits to check them, the less likely his potential is for holding the animal he may have in his trap. Thieves also plague the trapper, so it behooves him to get out and check his traps before they have the opportunity to do it for him.

Some trappers do benefit financially through trapping, but they work hard for the money they earn and our furbearer populations benefit from his toils. Still, I don't believe many trappers pursue furbearers specifically for financial gain. Let's face it, there are countless easier ways to make money, and such jobs don't require battling the elements of winter to be successful. It would be more accurate to say that these individuals choose to work independently at an occupation or hobby that offers them a close and satisfying relationship to the land and its wildlife.

Trappers come from all walks of life — students working their way through college, doctors and factory workers, whatever. Most are male, but not all. Most of these people trap primarily for the adventure that is derived from a trapline. They relate to the exciting role the trapper played in history, exploring the unknown distant reaches of this country, and incorporate it into the

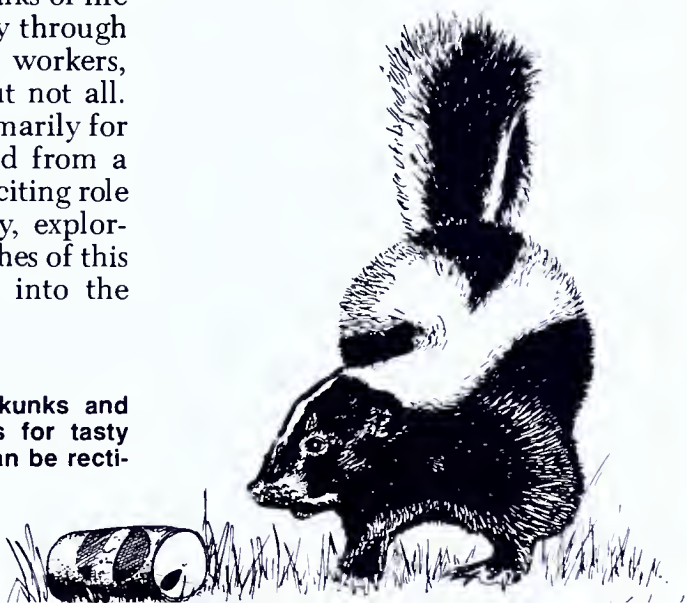
present. They enjoy matching wits with the animals, studying the forest floor for signs of animal activity, and the never-ending excitement of checking the trapline. Trapping provides the individual with a porthole to the exciting lifestyle of pioneers of the past.

The Game Commission regulates trapping and has restrictions that all trappers in Pennsylvania must adhere to. Everyone loses when trappers harvest furbearers unlawfully, so it is in the best interest of all sportsmen to help apprehend the individual who thinks he's above the law. After all, wildlife does belong to all of us.

The Pennsylvania Trappers Association is also a contributing force that is dedicated to the conservation of furbearing animals and the promotion of proper trapping laws. The organization is deeply involved with the training of novice trappers and defending the honor of this necessary practice.

On the whole, trapping in Pennsylvania is conducted and monitored by sound principles. It has to be, or in the end we all would lose. The perils of living in a non-trapping state would be threatening to say the least. But through the continuing efforts of ethical trappers, game protectors and their deputies, and the sportsmen who take to the fields, trapping and the benefits derived from it will trek far into the future. Remember, trapping is and will always be the soundest method of stabilizing our furbearer populations in Pennsylvania.

**RACCOONS** raid trash cans, skunks and opossums prowl the backyards for tasty treats, creating problems that can be rectified only by the trapper.







*There are fish tales and hunting yarns,  
but this story is just a . . .*

## **LOT OF BULL\***

**By Dave Lonich**

**I** DON'T remember the exact date, but it was a Saturday morning in mid-February. The temperature was slightly above freezing and the snow had melted, so I was devoting the early part of my day to what dog owners euphemistically refer to as "kennel chores."

As I waded through the task I forced myself to concentrate on the more pleasant aspects of owning springer spaniels. My thoughts of flushing (no pun intended) pheasants, were interrupted when a familiar green station wagon pulled up in front of the house. Clyde Haywood, a retired deputy game protector and the district's hunter education coordinator, stepped out of the car and greeted me.

During the past ten years Clyde and I have worked together on a variety of projects, and his visits or phone calls usually bring the promise of some new venture. Clyde's knowledge and skills are coupled with high generosity, and his willingness to help others has generated some interesting experiences for us. This Saturday morning was to provide another one.

"I need your help," he said. "We're going to play cowboys."

I didn't wait for more details. That statement was enough to convince me that the shovel and rake could be put away for another time. I went into the house to tell my family I'd be away for awhile.

In my hurry I didn't take the time to wipe my feet, and my departure from home was hastened equally by my curiosity and by my mother's discovery

---

\*Figuratively speaking, of course.

of what I had tracked across the dining room rug. Clyde was anxious, too, and had the wagon pulling away even before I shut the car door.

As we drove into the country, Clyde gave me more details of our mission. A friend of his had taken a 1,000-pound Black Angus steer to a slaughterhouse earlier in the week to be killed and butchered. The man and his family eagerly anticipated the pleasant prospects of a freezer full of steaks, roasts, and hamburger, but Mr. Bull apparently didn't share their enthusiasm for his future as the main course. Contemplating his fate, he made a break for freedom as he was being led into the killing room.

I visualized the whole thing as Clyde described how the bovine knocked aside several slaughterhouse workers, dashed across a small field, splashed through a creek, ran up a hillside, crossed a strip-mine, ran across a paved road and finally took refuge in a woodlot, where he still remained at large. The owner had attempted to recapture the beast, but once it had escaped the domestic environment of the farm, it quickly reverted to a wild state, becoming almost as wary as a deer.

As usual, Clyde's plan of assistance was simple and direct. "We'll pick up the owner and a couple of other fellows, and then we'll go round up his beef diners," he stated confidently.

I wasn't so sure.

Of course, we'd dealt with animals before. We had live trapped numerous rabbits, groundhogs, raccoons, and other garden pests. We had found lost hunting dogs. One time we even helped a farmer regather his herd of pigs that had escaped through a carelessly unlocked gate.

But a steer—that was something different. It doesn't seem natural to directly confront anything that outweighs you by over 800 pounds. Then, too, my experiences with Ferdinand and his relatives had left me anything *but* confident.

My mind drifted back to a previous encounter. It was several hunting sea-

sons ago, and my dad, my youngest brother Jimmy, and I had stopped on the roadside of a Greene County farm to ask permission to hunt. As we sipped a cup of coffee, a group of cattle gathered in a bunch in the field directly across from the car. We had parked beside a hayshed and the animals had obviously been conditioned to expect food whenever a vehicle pulled in there. As I walked over to get a closer observation of this demonstration of Pavlovian psychology, I noticed that each one had a numbered ear tag. On a whim I checked to see if any of them had in fact lined up in numerical order. None had, and I thoughtlessly made an audible comment about the low intelligence level of Bovids. That slip of the tongue was almost costly.

### Glare Of Revenge

A few minutes later, I entered the field about a hundred yards from where the cows stood, leading my young springer spaniel Keynes across the pasture to the woods beyond. My attention was riveted on the prospective hunting area, when I heard Jimmy holler at me. I turned to see fifteen head of irate cattle bearing down on me with a glare of revenge apparent in their eyes. I figured it was too late to apologize for my remarks and decided to run for it. Unfortunately, the nearest fence was at least 317 miles away. Uphill. And the critters were rapidly closing the gap.

Another complication arose as Keynes, in his puppy frame of mind, viewed the impending disaster as a chance to meet new playmates and ran toward his newfound friends. (Did I mention something about the pleasant aspects of dog ownership?) As the dog and I, pulling in different directions, came to the limits of the six-foot lead, something had to give. Naturally it was me. My footing was on some slippery "surface" and I was jerked to the ground. Rolling up on to my knees, I was finally able to pull the springer close to me, scoop him up in my arms, get up, and take off for safety. Cumbersome hunting clothes, poor traction, and forty pounds





***Dutch Country Bluebirds*, by Ned Smith, is the second feature in the Game Commission's series of fine art prints being offered through the Working Together for Wildlife program. The sale of this limited edition of 600 signed and numbered collector-quality prints will be used to support nongame research and management programs, including bald eagle, osprey and river otter reintroduction projects. Delivered prices for the 15 x 22½ prints are \$125, \$225.50 framed, payable to the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, PA 17105-1567.**

of squirming dog offset the effects of increased adrenaline, and I made it to the fence barely ten feet in front of my pursuers. I threw the pup over then dove across myself. But my feet hung up on the top strands of barbed wire and I crashed to the ground in an upside down vertical position with my face only inches away from the pounding hooves. Luckily, no real damage was done, but my fear and embarrassment (aided by my family's hysterical laughter at the whole thing) intensified my bovine phobia.

With my mental trauma thus reopened we arrived at our destination. There were now four of us as Clyde and I had been joined by the steer's owner and a friend, John Bruno. But the odds

still weren't too appealing to me, considering the fact that the steer still outweighed all of us combined. Our plan was to spread out, find the animal, and then drive him to a corner of a woodlot, where an opening in the fenceline would give him access to a pasture which held a herd of Charolais cattle. We hoped the Angus would join them and come in to the barn where he could be loaded onto a truck for a return trip to the slaughterhouse.

We spread out and searched the woods for any signs of the quarry. My ability at this sort of thing is greatly limited; normally I have trouble following railroad tracks. But to my amazement, there it was — a line of huge cleft hoofprints! The combination of soft earth and the critter's saucer-size feet left a wake even my myopic orbs could follow.

The situation was perfect for daydreaming, and in *Walter Mitty* fashion I drifted off. My mind whisked me to East Africa, on safari with Jack O'Connor. The broken limb I'd picked up was transformed into a 458 Winchester, and I trekked on, my eyes shifting from the spoor to the thickets beyond, anticipating a charge at any time.

Inevitably I saw it. The four thick legs caught my attention first, then the massive head and body. He was only 25 yards from me and my daydream dissipated instantly. I was *sure* he was a relative of those cows that almost got me in the Greene County field, and my 458 stick just didn't have the stopping power needed to dissuade an angry encounter.

A hoarse stage whisper from the animal's owner completed my transition to reality. "Do you see him, Dave?" The topography had temporarily screened his view of the steer, but another step brought the big black critter into plain view. He almost yelled, "Hushhhh," and with good reason. The steer was getting jittery, and I was adding to his nervousness by being unable to stifle a fit of convulsive laughter. Though I fully realized that the owner's family



**FOR THE first time during the whole episode I became consciously aware that I was wearing a red jacket. Thankfully, this young monster hadn't read the same book, and he suddenly turned and ran into the pasture.**

could ill afford the loss of all that meat on the hoof, I couldn't repress an image of Elmer Fudd creeping along and saying "Be very quiet"—just before Bugs Bunny lowers the boom.

The steer had about all the attention he wanted, and began to edge away—unbelievably, in the direction we wanted him to go. The animal's dexterity and fluidity of motion were impressive. He moved with an almost sideways gait, seemingly keeping one eye on us and the other on his destination. We followed parallel to him, until he reached the entrance to the pasture. At that point he spun around, his hind-quarters in the open field, and stood facing his oncoming enemies. The owner gave another one of his "whispered" warnings, and I started laughing again, but not for long.

The beast glanced to his left at Clyde and John, then looked to his right and then fixed his attention on me! A weird, glazed look came into his eyes, and I knew he had picked his escape route. I reached out to steady myself on a nearby tree, and for the first time during the whole episode, became consciously aware that I was wearing a bright red jacket.

As we stood motionless for endless moments, I tried to convince myself that animals are colorblind. Then I saw his tail come erect. I remembered reading that lions or elephants or whatever will signal an impending charge by rais-



ing their tails. I expected the worst. Thankfully, this young monster hadn't read the same book, and he suddenly turned and ran into the pasture.

According to plan, he quickly joined the herd of Charolais, who engaged in a supposedly typical form of cattle introduction. They greeted their newly adopted brother with bellowing, biting and butting, and generally kicked the heck out of him. I thought that had to be one crazy way to tenderize beef, but the owner wasn't concerned. He was just relieved that his meat supply was now under control.

Later, after the Angus had been reduced to edible portions, we were all invited to a steak dinner, but I declined. I'm not usually squeamish about food, but I felt a certain affinity for this critter that couldn't be put aside at the dinner table. Besides, somewhere out there, in some pasture, I'm sure he has relatives. . . .

## The Wingless Crow

Chuck Fergus's "Thornapples" column has for years been one of the most popular features in GAME NEWS. We have had many letters asking when we were going to put out a "Thornapples book." Such a book is now available. Chuck personally selected thirty-three of the eighty-plus essays published here in the past seven years, edited them slightly, and arranged them into a logical sequence. They have been completely re-set and integrated into a 200-page hardcover book entitled *The Wingless Crow*. It is now available from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Price is \$10 delivered.





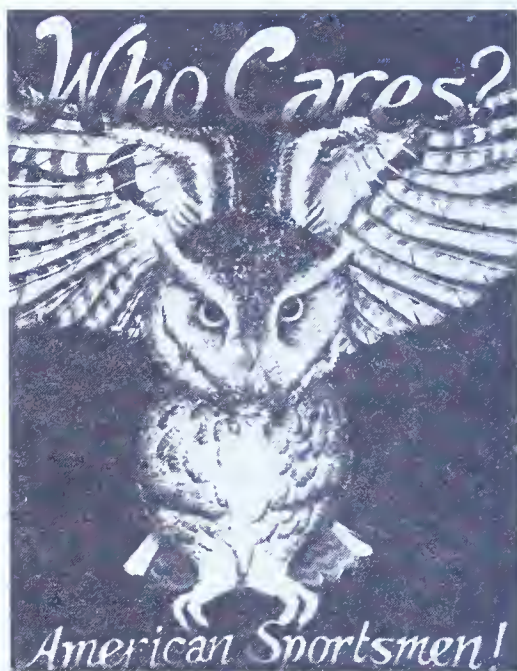
**MICHELLE KOCHENASH**, Whitehall, an 8th grader at Whitehall-Coplay Middle School in Lehigh County, took second place and the \$60 prize in the junior division.



**NATHAN KANOFSKY**, also an 8th grader at Lehigh County's Whitehall-Coplay Middle School, took third place in the junior division and received \$50 for the poster above, while classmate **DENISE FORTLEY** captured fifth place in the junior division and \$25 for the poster below.



# Federation Poster Winners

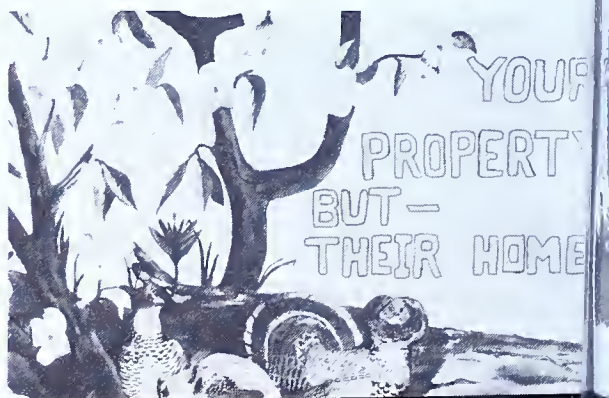


KIP  
in  
gra  
en  
gra  
Sc

*Here are the winners of the Pennsylvania poster contest. Students throughout the state submitted their entries illustrating the sportsman's role in protecting the environment at the Federation's fall meeting. Each entry was judged by a panel of senior divisions (all 16 couldn't be shown at the meeting). The winning national competition sponsored by the Federation is always, our black-and-white reproduction of the winners.*

1

**SEAN McKEONE**, 16, from Potter County's Couderdport High School, finished third in the senior division and received \$50.







NA and REBECCA WILLIAMS tied for first place in the junior division and each received \$75. Kim, a 12th grader at Freeport High School in Armstrong County, produced the poster on the left. Rebecca, Kittanning, an 11th grader at Armstrong County's Elderton Junior-Senior High School, produced the poster above.

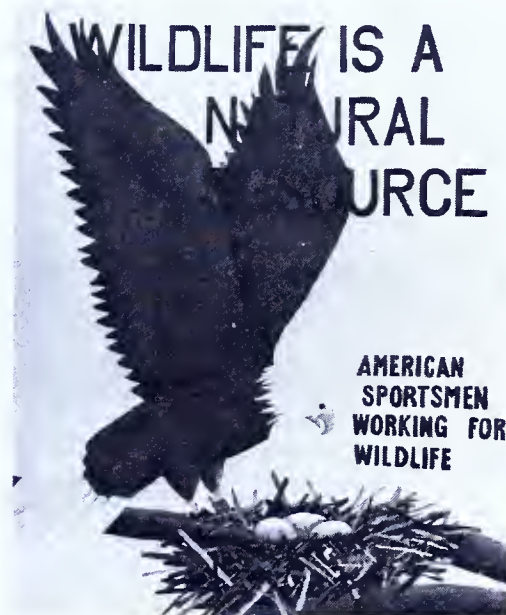
The Federation of Sportsmen's Club's 1984 Wildlife Poster Contest was held to raise funds for the National Shooting Sports Foundation. As a result of the contest, the following poster was produced by Jody Fultz, a 10th grader at the Dauphin County Technical School, placed 5th and received \$25 for the poster above. Michelle Hockenberry, an 8th grader at Cumberland County's Shippensburg Area Junior High, placed 4th in the junior division and won \$40 for the poster below.

Fourth place in the senior division and \$40 went to Joe Eustace, a 9th grader at the Coudersport High School in Potter County.



## ..SAVING WILDLIFE .....

First place in the junior division and \$75 was awarded to DAVE LEASER, an 8th grader at Lehigh County's Whitehall-Coplay Middle School.



JODY FULTZ, Harrisburg, a 10th grader at the Dauphin County Technical School, placed 5th and received \$25 for the poster above. MICHELLE HOCKENBERRY, an 8th grader at Cumberland County's Shippensburg Area Junior High, placed 4th in the junior division and won \$40 for the poster below.





## Surrounded

William Mimm, a cooperator on a Farm-Game project in Schuylkill County, was running foxhounds when he heard a great-horned owl. He imitated the owl hoots and quickly lured a pair to nearby trees. He continued calling and before long three more arrived.—LMS Barry D. Jones, New Ringgold.



## Unexpected Visitor

LANCASTER COUNTY—Margret Weaver, Morgantown, keeps children for working parents and often has a house full of kids. As children often do, they left the front door open. An unexpected visitor, a doe, came in and ran into the bathroom. Mrs. Weaver quickly closed the bathroom door, and then evacuated the children from the house. With this completed she returned to the bathroom door, where the deer could be heard thrashing around. She carefully opened the door. The deer ran out and back out the front door. Everyone was safe and sound, including the deer.—DGP Ted Fox, Ephrata.

## Doing It Scientifically

LYCOMING COUNTY—More and more landowners are incorporating wildlife management techniques on their properties here. They are planting and maintaining food plots and fruit producing shrubs, seeding old roadways, cutting timber systematically, and using fencing to help regenerating seedlings become established. These are all proven techniques that take a little extra effort and require a relatively long time before results are seen. However, such practices do much more for wildlife than simply investing in a feeding program.—DGP Dennis Dusza, Williamsport.

## Explains Everything

CUMBERLAND COUNTY—Halloween night a youngster asked my wife what was in the cage on our front porch. My wife explained that it was a young squirrel adopted after it fell from its nest, and that it would be returned to the wild when it was able to care for itself. The youngster then said, "Oh, that's right—you're the GAME NEWS." —DGP Robert Snouffer, Meehaniesburg.

## Or Bury Them

YORK COUNTY—The rabies scare is getting a little far-fetched. A lady reported seeing a mouse running in circles on the road. She thought it might have rabies, and purposely drove over it with her car. She then wanted to know whether she should scrub her tires down. I wonder what she would have done if I had told her to burn her tires. —DGP Robert L. Yeakel, Red Lion.

# Ghost Busters

**BRADFORD COUNTY**—On a sunny Saturday afternoon last fall, I took my daughter Holly with me to visit farmers enrolled in our Safety Zone Program. When we passed an old house which all the kids in the area say is haunted, and since halloween was coming up, Holly asked to stop and peek in the windows. After a little coaxing, I turned around and drove into the driveway. Holly said, "Dad, there's a truck out back." Thinking it was an abandoned vehicle—it could not be seen from the road—we got out and started toward the door. I heard noises and told Holly someone was inside. She went back to the car while I knocked on the door. When it was opened I discovered three men inside with two deer and a red fox—all illegally killed. I arrested them all and ended up putting two in jail while the third went back to New Jersey for money to pay his friends' fines. They ended up paying \$1800 plus \$70.50 court costs.—DGP William A. Bower, Troy.

## Can't Win

**ALLEGHENY COUNTY**—Messages left on my phone recorder indicate that many callers think I'm never in my office. So, I stay in one day and the first caller wants to know why I'm in the office and not out catching bad guys.—DGP S. Lockerman, Pittsburgh.

## Looking Better

ADAMS COUNTY—It remains to be seen how successful our attempts to produce hardier pheasants will be, but I can tell you one thing, the birds we stocked this past fall were wilder than any game farm birds I have seen before. They looked good, flew well, and did not stand around the back of the stocking truck waiting to be taken back to the game farm. I hope these are signs of better things to come.—DGP Larry Haynes, Biglerville.



## Where's the What?

While working in Union County on the first day of small game season, Deputy Waterways Patrolman Bowersox apprehended two men with untagged turkeys. I arrived on the scene and, after they settled on field acknowledgements, one defendant insisted I watch him affix the tag to his turkey. After tagging the bird he asked if it was a hen or a gobbler. When I said gobbler, he looked puzzled, picked up the head, pointed under the beak and asked, "Where's the beard?" I'm still not sure I convinced him that the small tuft on the bird's chest was called a beard.—LMO Ken Zinn, Jersey Shore.

## Making Small Amends

**NORTHUMBERLAND COUNTY**  
— Eight people recently were convicted for driving under the influence, and sentenced to perform ten hours of community service apiece by picking up roadside litter. The chief probation and parole officer of the county said the program, instituted by the county court, has a two-fold purpose. First, the offenders are made to feel some level of humiliation by working off part of their penalty along public highways, and second, he said, it is hoped this type of penalty will be a better deterrent to others who might drink and drive.—DGP James M. Kazakavage, Sunbury.





### Where's The Prize?

I used to think of loggers as being the rough, tough men of this world, accepting nothing for breakfast but ham and eggs, homefries, a stack of hotcakes and maybe even a little sawdust mixed in with their black coffee. I changed my mind the other day, however, when I learned that a logger working on a nearby Game Lands starts every day with a bowl of Captain Crunch.—RF Paul Confer, Howard.

### Banner Year

FOREST COUNTY—Last year was without a doubt the best one for turkey hunters in the twelve years I've been here. I checked seven birds on just the first day and I heard of many more throughout the season.—DGP Al Pedder, Marienville.

### Oh My Gosh!

CENTRE COUNTY—I was pleased with all the help we received with our pre-season pheasant release. All went well, with one exception. One group which had several crates of pheasants to release complained there were too many nails in the crate tops. They said removing them was time consuming and made it difficult to release all the birds. They were speechless when we showed them the sliding doors on the sides.—DGP Joe Wiker, Port Matilda.

### Goofed

ALLEGHENY COUNTY—Very early one morning Deputy Dale McCullough and I saw a spotlight working way off in the distance. We tried to pinpoint the location and then went after it. After carefully working up on this light, trying not to let them see us, we finally came upon the vehicle. It turned out to be a garbage truck with a light mounted on the side so the garbageman could see the cans he was picking up in the dark.—DGP D. E. Hockenberry, Pittsburgh.

### Don't Forget Bananas

POTTER COUNTY—As if I don't have enough to do with native animals, I recently received a call about a monkey running loose in the Germania area. I wonder what my regional director will say when I ask him to order some monkey traps?—DGP Ron Clouser, Galeton.



### Rock On, Kid

UNION COUNTY—During a break in a hunter education course, one youngster asked if he would satisfy the protective clothing requirement by using at least 100 square inches of fluorescent orange hair spray like some punk rockers wear.—DGP Bernie Schmader, Millmont.



## Every Year

While attending a sportsmen-farmers banquet, I was amazed by the number of complaints about deer. One farmer said he had over 140 deer in his fields at night, and another claimed 163 were visiting his fields. Soon, however, I'm sure we will be hearing again that we have permitted all the deer to be killed. —SIE John Badger, Ligonier.

## Despicable

CLEARFIELD COUNTY — A Frenchville man was showing off this area to a visitor from Alaska when they found a deer that had been blinded by a shotgun blast. As they showed me the animal the Alaskan remarked, "I came all the way from Alaska to see something like this?" Whoever shot that deer caused untold suffering to a fine animal and blemished the image of Pennsylvanians in the eyes of a sportsman from a far-away state. I wonder how many hunters in Alaska have already heard about the "Pennsylvania hunters?" —DGP Don Zimmerman, Morrisdale.

## Adapting

MONTGOMERY COUNTY—Deputy Tom Scarpello was driving through Upper Moreland Township last fall when he spotted an osprey. He watched as the fish hawk plummeted into a tiny pond and captured a small gold carp in its talons. Osprey sightings are rare anywhere in Pennsylvania, but especially unusual at this particular pond as it's located directly in front of a huge shopping mall and bowling alley in the middle of town. I couldn't figure out what attracted the osprey, as it was miles from any other waterways. Then it suddenly occurred to me that a new seafood restaurant had just opened adjacent to the pond. Urban wildlife is incredibly resourceful, wouldn't you agree?—DGP William Wasserman, Montgomeryville.

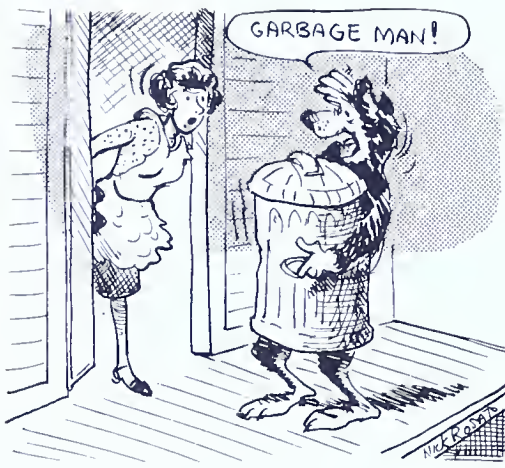
## Misinformed

ERIE COUNTY—Deputy John McKellop and I were on Game Lands 143 when we came upon two turkey hunters. When we asked if they had seen any, they replied, "No, but on Saturday they were really in here. Our buddy got stopped by a game warden and he told them they were really stocked in here." I then asked where these birds had come from, and he said from the Northeast. He was sure because that was where he was from. As it happens, I'm the one responsible for trapping turkeys in this area, and we've never trapped any from the Northeast. I wonder where some of these people come up with their ideas.—DGP Wayne Lugaila, Waterford.



## Wrong Priorities

The opening hour of small game season found me parked on a hillside overlooking a stand of dense cover. Scattered below were tiny orange spots defining the progress of hunters as they made their way through that jungle in search of game. Three forms, however, were clad only in brown. As I was thinking how much safer they would be if they were wearing at least a splash of color, their pointer suddenly burst from the end of a row. He was absolutely resplendent in his new full length blaze orange jacket.—LM William J. Lockett, Perkasio.



### When The Cat's Away

**LUZERNE COUNTY**—While I was on night patrol my wife heard the trash cans on the back porch being bounced around. Since trash pickup was the next morning, she thought I had come home and was putting the cans out. Well, the trash was being put out all right—not by me but by a bear which greeted her at the kitchen door when she went to investigate. This was one bear-garbage complaint I investigated personally, and I gave her the same advice I give to the public: keep the garbage secure indoors for a week or more, until the bear finds another place for an easy meal.—DGP Edward J. Zindell, Wilkes-Barre.

### Gettin' Around

**BUTLER COUNTY**—Only a small percentage of the seeds hidden by squirrels and chipmunks are recovered and eaten. Much of the reforestation of cut-over areas and reverting fields is due to the storing habits of these rodents, who simply are laying up a cache for lean times. Since the seeds of many of our valuable trees are too heavy to be blown to new areas, an invaluable service is performed annually by these industrious animals. Nature works in many mysterious ways.—DGP Ned Weston, W. Sunbury.

## Signs Of Changes

**GREENE COUNTY**—The pheasant and grouse situations here accurately demonstrate just how crucial a role habitat plays in wildlife survival. Each year we stock pheasants in a put-and-take program. Hunters take a percentage of these, leaving the rest to carry over to next year. But, primarily because of the habitat, we see only marginal reproductive success. On the other hand, the habitat in this county is favorable for grouse. Without stocking a single bird, our grouse population has been consistently good to excellent.—DGP S. A. Kleiner, Waynesburg.

### Take 963

**FULTON COUNTY**—While preparing to do a ten-minute TV spot on rabies, I was getting a little nervous until Greg Confer and Tim Rigby told me to relax as they could keep shooting until we got it right. They probably wished they had that statement back. It took about 45 minutes of film to get the ten minutes they could use. It's a good thing it wasn't a three-hour documentary or we'd still be out there taping.—DGP Mark Crowder, McConnellsburg.

### Over Run

While patrolling along the railroad tracks that cut through Game Lands 130, Land Manager Jim Deniker and I came upon an unusual sight. Lying between the rails was a large red fox that had been decapitated by a train wheel. We searched up and down the tracks and the story unfolded as we found the clues. Apparently the fox tried to run along under the train for some distance, losing tufts of hair as he went. Then his tail got caught under a wheel and he died when he spun around toward the wheel. How he got under the train to begin with will remain a mystery.—SIE Bob MacWilliams, Franklin.



# Record (1547) Bear Harvest

Pennsylvania's bear hunters took a record 1547 black bears during the state's 1984 two-day season, a preliminary survey shows. It was the second consecutive year in which the harvest exceeded 1500. Even more importantly, the 1985 population should be at least as large as it was in 1984.

The large harvest is a reflection of two significant points: the Game Commission's relatively new bear management program is successful, and there is now a large black bear population in Pennsylvania.

Prior to 1983, the largest bear harvest in the state had occurred way back in 1924, when 929 bears were taken during a six-week season. When harvests dropped below the 300 level in the late 1960s and early 1970s, the Game Commission launched a major research program to learn more about bears, shortened or closed hunting seasons, and inaugurated other measures to improve the lot of the valuable wildlife resource. Big dividends have resulted from the moves, especially the creation of a bear hunting license, limiting the number of hunters (100,000 bear licenses were authorized in 1984), and even re-scheduling of the hunting season one year in an effort to avoid the overharvesting of pregnant females.

Prior to the 1984 season, wildlife



GLENN HESS, Harrisburg, posing here with his son, took this 250-pound black bear during the 1983 season, the first year in the state's history when a harvest of over 1500 bears was achieved.

biologists had said hunters needed to take a minimum of 1000 bears to keep the population from further escalating and help lower the incidence of bear damage and nuisance complaints, which were at an all-time high in 1984. The 1547 taken do not represent an overharvest. In fact, the harvest rate of pregnant females was lower than normal in 1984, which bodes well for the future of the resource, but portends possible headaches for those who suffer from bear damage.

The large harvests in 1983 and 1984 were due to three things: (1) a large bear population, (2) availability of food, and (3) good weather during the bear hunting season. For years it was believed that bears went into dens when the weather turned cold and nasty, but





Game Commission research has pretty well established that bears "den up" when they run out of food, regardless of weather conditions. During the fall of both 1983 and 1984, bear food supplies were good, and the animals were available to hunters. Miserable weather conditions prevailed during the 1982 two-day season, and the harvest was relatively low, only 588.

Leading 1984 bear harvest counties were: Clinton, 197; Lycoming, 147; Pike, 113; McKean, 109; Tioga, 99; Clearfield, 87; Cameron, 86; Potter, 65; Elk, 63; and Monroe, 60.

Some of the bears were huge. The largest weighed by Game Commission check station personnel tipped the scales at 620 pounds. This one, weighed before it was field dressed, was taken in Clinton County by Robert Campbell of Dickinson.

However, the "heaviest" bear tagged last year came from the Summit Hill area of Carbon County. This trophy, taken by Mark Miller of Summit Hill, had a field dressed weight of 574 pounds. Since a bear normally loses about 15 percent of its weight through field dressing, this bear probably had a live weight of 675 or more pounds. That is one big black bear!

A 542 pounder (before field dressing) was taken in Cameron County by Thomas Spangler of Fairhope.

Robert Banghart of Muncy tagged a Lycoming County boar that field dressed at 507 pounds. This one would

have had a "live" weight of just under 600 pounds.

Clearfield County produced a trophy with a field dressed weight of 483 pounds. It was taken by John E. Folman of Drifting. Its estimated live weight would be about 570 pounds.

A similar size bear, weighing 484 pounds field dressed, was tagged in Lycoming County by Craig Beaver of Muncy.

Pike County recorded a couple of big bears. One, which field dressed at 475½ pounds, was taken by Jeffery Leri of Eynon, and another, which dressed 469½, was taken by Arnold Slonaker of Hereford.

Richard Ballot of Honesdale tagged a 469½ pounder (live weight) in Wayne County.

At least 126 bears taken in 1984 weighed over 400 pounds. Twenty of those were field dressed animals.

Hunters took 1159 bears the first day, and 388 the second day.

On the first day, 35 bears were taken before 7 a.m.; 234 (about 20 percent) were harvested between 7 and 8 a.m.; 180 (over 15 percent) were shot between 8 and 9 a.m.; 173 (15 percent) were bagged between 9 and 10 a.m.; 111 (about 10 percent) dropped between 10 and 11 a.m.; and 90 (about 8 percent) were taken between 11 a.m. and noon. The remaining 336 (about 29 percent) were harvested after noon. The pattern was similar on the second day of the season.

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Popular Sporting Rifle Cartridges**, by Clay Harvey, DBI Books, One Northfield Plaza, Northfield, Ill. 60093, 320 pp., softbound, \$12.95. Harvey divides the available rifle cartridges into varmint/target, varmint/deer, deer/bear, and medium/heavy big game categories, then gives personal observations on each, handloading data, and other pertinent stuff. Includes many quotes from other gunwriters to buttress his viewpoint: they are interesting but perhaps unnecessary as he himself is an expert in the field—as he proves by recognizing the virtues of the excellent but largely forgotten 284 Winchester. Loads of photos too. A good job.

# Treetop Browse

By **Steve Liscinsky**

PGC Wildlife Biologist

**I**T IS SAID, particularly in the north-woods, that the sound of the chainsaw is the dinner bell to deer. Indeed, many a woods worker (tree feller), while still sawing in the immediate vicinity, has seen deer browsing on the tops of trees he has just felled. Browse is an excellent source of food for deer—especially in the winter months—and browse cutting can even be economical if it's a byproduct of a timber sale.

The importance of this source of food was further emphasized in 1956 when the Game Commission mandated that \$1 from the sale of every antlerless deer license be used solely for cutting or otherwise removing overshadowing tree growth to produce underbrush sprouts and saplings for deer food and cover on Game Lands. Sometimes, but not always, trees cut under this program are marketed. If they are, the venture can be financially rewarding, too.

In addition to Game Commission browse cutting, it is not uncommon for sportsmen's groups, Boy Scout troops, and others to take to the woods and spend a winter day cutting down trees to make more browse available for deer. This activity not only provides good food for deer, but it's also good exercise for the participants.

While these facts and practices have been generally accepted, questions such

as the following came up: How much browse is there in the top of a tree? How much browse would there be from the tops of all the trees on a given acre of forest? Do some species of the same diameter produce more browse (in their crowns) than others? Do deer have a preference for certain species?

## Clipped and Weighed

To shed some light on these questions, PGC wildlife research biologists clipped and weighed all the current growth from a large sample of felled trees in different size classes of forest. This was done during the dormant season when the leaves were off the trees.

It soon became evident that it takes a tree with an exceptionally large crown of vigorously growing twigs to produce more than a few pounds of browse a year. These conditions seldom exist in a dense forest where trees are crowded. It also became evident that there was a difference in browse production between different size classes of forest. In very round figures, the seedling-sapling state (up to 5 inches in diameter) produced 900 pounds per acre; the pole-timber stage (6 to 11 inches) 600 pounds; and the sawtimber state (12 to 18 inches) 300 pounds.

There is also a difference in browse production between trees of the same diameter in different stages of stand size class. A 4-inch diameter tree in seedling-sapling state produced over six times as much browse as a 4-inch tree in a pole-timber stage forest (Table 1).

**IT IS not uncommon for sportsmen's groups, Boy Scout troops, and others to take to the woods and spend a winter day cutting down trees to make more browse available for deer. This activity not only provides good food for deer, but it's also good exercise for the participants.**





**Table 1**

**Average fresh weight of browse (lbs. per tree) from the tops of trees in a seedling-sapling and poletimber size forest by diameter at breast height.**

D.B.H.	Seedling-Sapling	Poletimber
1	.09	
2	.43	.13
3	.98	
4	1.94	.30
5		
6		.64
7		
8		1.14
9		
10		1.88

There was also difference in browse production between species of the same diameter in the same growth stage. Four-inch diameter trees in a seedling-sapling state showed a range from 1.18 pounds for aspen to 3.68 pounds for ash, per tree (Table 2).

**Table 2**

**Average fresh weight of browse (lbs.) from the tops of 4-inch diameter trees in a seedling-sapling size forest by species.**

Aspen .....	1.18
Red Maple .....	1.26
Black Birch .....	1.36
Beech .....	1.70
Red Oak .....	2.67
Tulip Poplar .....	2.75
White Ash .....	3.68

What about browse production after a forest is cut? Most studies show that after clear-cutting browse production increases for a few years (three or four), then declines, and by the tenth year less is produced than in the first year.

In another study, where all deer were fenced out after clearcutting, browse production decreased 83 percent from year seven to year fourteen.

It is interesting to note that in still another study, where a pole-size stand was clearcut, it took 40 man-hours to fell all the trees on one acre. The weight



**ONE POUND of browse may seem and look like a lot, but a deer needs a minimum of two pounds of browse a day, and will eat 7 pounds or more if it's available.**

of the browse from these trees was 202 pounds.

What about preference? Was there any? Here's what the only test showed. Given the same amount of freshly cut browse from five species of oak, deer consumed 91 percent of the chestnut oak, 86 percent of the black oak, 80 percent of the scarlet oak, 36 percent of the red oak, and 21 percent of the white oak before the twigs dried up five days. Initial moisture content in these species ranged between 40 percent and 60 percent.

More detailed reports of these studies are available from the Pennsylvania Game Commission, Bureau of Game Management.

Data used in this article were collected mainly by the author, but with the help of several other wildlife biologists, primarily William Drake.

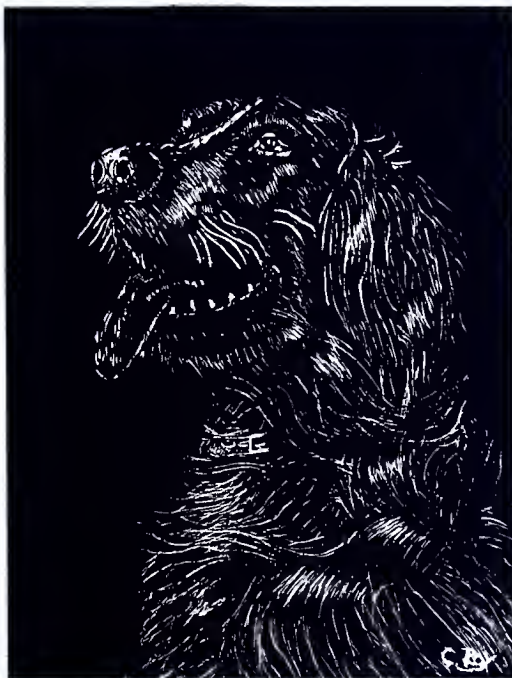


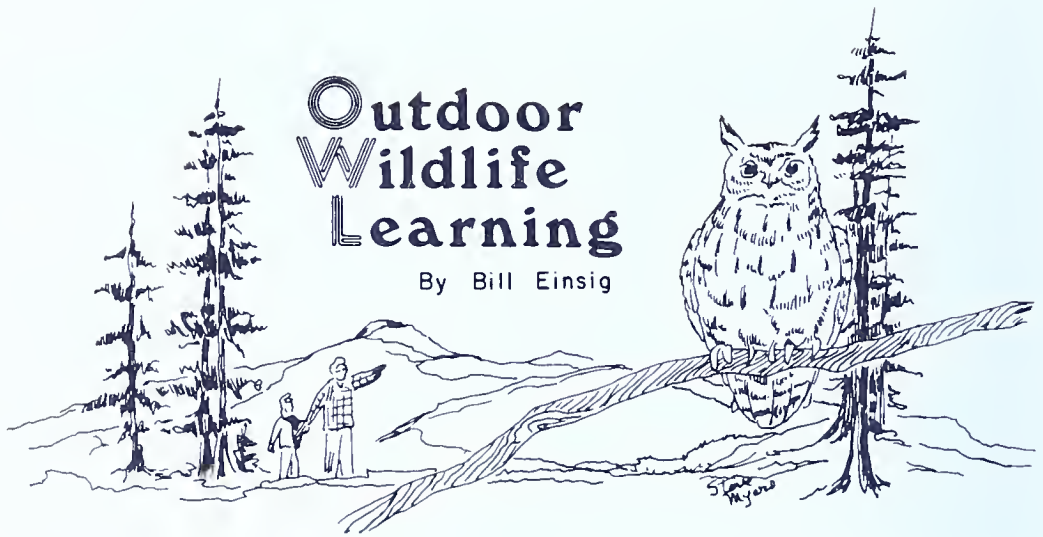
# young artists page



Raccoon  
Dave Morris  
Simpson, Pa.  
Carbondale Area High School  
9th Grade

Dog  
Curtis Roy  
Grantville, Pa.  
Lower Dauphin High School  
12th Grade





"I can't say those words in class!"

I had just asked one of my students what his parents had to say about a homework assignment I had made for my ninth-grade classes. Obviously, this parent wasn't very impressed with my methods.

I'll admit the assignment was a bit unusual. I wanted my students to notice the ways we use water so frivolously at home. Turning the tap, flushing the toilet or sprinkling the lawn are taken for granted. Water bills are usually the lowest of all the utility bills and most of us think little of the water we waste.

For example, even as I write this column, I can hear a slight hiss coming from the toilet in a nearby bathroom of my house. I know that tank is leaking because I tested it with food coloring and was surprised at how quickly the bowl water turned bright red. That was several months ago—at least.

I wonder how much I've paid for the privilege of neglect. Let's see. In the last three months, my family used 21,300 gallons of water and cost me \$32.24. That averages about 0.15 cents per gallon. My hissing toilet probably wasted about 50 gallons per day so in three months it lost 4,500 gallons.

Egads! Some simple math tells me I paid \$6.75 just for my leaky toilet. That doesn't include the dripping faucet in the powder room or the squirting washer in my garden hose. An that was for only one three-month period. In one year I lost about \$27.

I'm sure we all have chores like that crying to be done. Sometimes noticing them is the toughest part.

That really was what my assignment was all about. I wanted my students to notice how much water their families used in a

variety of ways. For four days, they had to time showers, count washer loads, measure depths of baths and (horror of horrors!) count flushes.

The very idea. "Could this be an invasion of privacy?" "What is he going to want to know next?" "It's none of his business!" And best of all, "I can't say those words in class!"

## The Water Awareness Kit

Teachers today have things a bit easier, thanks to the ingenious folks in the Water Conservation/Technical Assistance Program of the Department of Environmental Resources. They, too, are concerned about wasted water and are anxious to demonstrate how to repair leaks and replace conventional fixtures with newer types that use less water.

They've assembled a kit that demonstrates practical ways to save water at home. The kit includes dye tablets to check for toilet leaks, examples of low-flow aerators, low-flow shower heads, a 16mm movie, a 35mm slide program, pin-on buttons for the whole class, and a teacher's guide loaded with activities.

The neatest thing about the kit, though, is a functional toilet tank. Made of clear acrylic, the tank will hook directly to almost any faucet and will fill and flush like a real toilet.

The one I tested fit best on my kitchen faucet and the tank itself straddled the sink basin. My own youngsters flushed the tank repeatedly just to watch all the parts work inside.

I sat my tank atop a 5-gallon plastic bucket, flushed it and then estimated the flush volume by measuring the water in the bucket. The tank used only 3.25 gallons per flush. That's good compared to older con-

ventional models that use 5–7 gallons per flush.

The kit includes two water dams. I used one of them to see how much it would reduce flush volume. The dam is a rubber-edged flexible barrier that inserts across the interior of the tank. It holds back a certain amount of water, preventing it from flushing into the bowl. Of course, the exact location in the tank determines the volume of water saved, but one water dam in my tank saved nearly 1.25 gallons.

I had a problem using the second dam. The flush valve requires so much room as it swings open that my dam was always in the way unless I placed it to the extreme end of the tank behind the filler valve. In this position, it saved little water but it illustrated the idea that whatever homeowners do to reduce flush volume should not interfere with the operational mechanism itself.

It would also be interesting to experiment with various size containers in the tank to displace flush water. Two-liter soda containers fit nicely, as do many plastic gallon-size containers. Most of these require some weight, however, to prevent them from shifting position with each flush and ultimately fouling the mechanism.

The toilet tank and included hardware will be a dynamic attention-getter for lessons on water conservation. Students can experiment with their own ideas and can compare the classroom tank with their own systems at home.

Students are likely to suggest that another good way to save water is to simply flush less often. That's certainly an important point. Flushing a cigarette butt, for instance, is a needless waste of water. In fact, if you are observant in the next few days you'll probably find yourself flushing when it's not really necessary.

Think about this: Isn't it strange that we use 5–7 gallons of the most highly treated water in the world to carry away a few



A limited number of commemorative patches marking the 25th anniversary of formal hunter education in Pennsylvania is still available. These high quality full color embroidered patches are sure to please hunters, hunter education instructors, and memorabilia collectors. Patches cost \$2.50 each and can be ordered from the Game Commission, Hunter Education Division, P.O. Box 1567, Harrisburg, PA 17105-1567.

ounces of waste and then, in many cases, pay again to clean the waste from that same water? It seems that we've bought into the idea of water-based waste disposal so thoroughly that we are no longer creative enough to devise a more rational system.

The Water Awareness Kit is available on loan from the Water Conservation/Technical Assistance Program. For more information on how you can borrow a kit for your classroom, scout troop or sportsmen's clubs, contact Ken Riesinger, DER, P.O. Box 1467, Harrisburg, PA, 17120, or call (717) 787-5008.

Now, you'll have to excuse me while I repair that leaky toilet.

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Gun Trader's Guide**, 11th ed., by Paul Wahl, Stoeger Pub. Co., 55 Ruta Court, South Hackensack, NJ 07606, 416 pp. softbound, \$11.95. Latest update of a most-respected guide to used gun prices. Covers handguns, rifles and shotguns of hundreds of manufacturers.



# Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Doult, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

## Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER PATCH .....	\$ 3.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1985 ART PRINT "Big Woods Bobcat" .....	\$125.00
_____	1984 ART PRINT "Dutch Country Bluebirds" .....	\$125.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

## Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

## Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 charts) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

## SPORT Items

_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

## GAME NEWS

_____	1 Year Subscription .....	\$ 6.00
_____	3 Year Subscription .....	\$ 16.50
_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 3.50

## Waterfowl Management Stamps (Voluntary)

_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

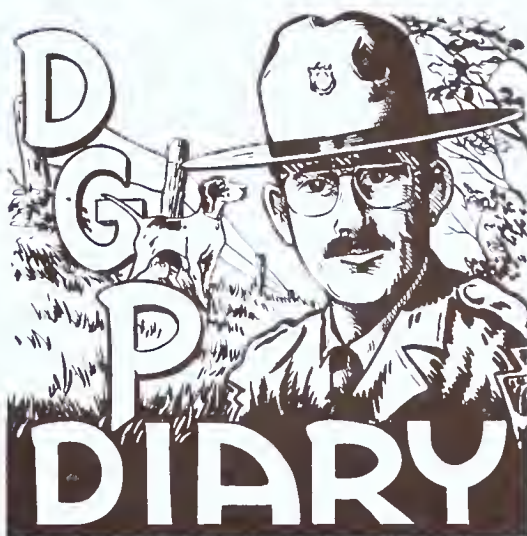
**F**EBRUARY in the Northcentral is a cold bleak month of short days and long nights. Given the wrong weather conditions it can also be a time of extreme stress for many wildlife species. With the peak hunting season behind us it is a period when game protectors direct their efforts toward public relations and deputy training.

*February 2*—In the evening I attended a course on forest fire fighting presented by the Bureau of Forestry. It was a good review for me as the last exposure I had on the subject was many years ago when I was a forestry student at Penn State. We have been experimenting with controlled burning on our Game Lands here in Cameron County, hoping to get the elk to graze on our food plots instead of devastating crops on adjacent farmland.

*February 3*—A caller reported a deer killed by dogs. Quite often in this country, as snows deepen dogs succeed in pulling down some of the weaker fawns from the previous spring. It is one of Nature's mechanisms for culling out those individuals least adapted to survive. This animal, however, was a large mature doe in what appeared to be good health. I opened her up and found that she was barren. In good deer range almost every doe of her age would be bred, with many carrying twins and some even triplets. Cameron County, unfortunately, is in the poorest class deer range, and this classification is certainly mirrored by the low reproductive rate of our does.

*February 4*—I meet individually with Deputies Bill Olivett and John Schatz to discuss their annual performance evaluations. Once a year each game protector prepares a rating sheet on every one of his deputies. It is a good opportunity to sit down for an hour or so with each officer and discuss his strengths, make suggestions for improvement, and learn his goals for the coming year.

I have a beaver tagging session scheduled following the evaluations, and the two officers remain to assist. We are disappointed with the low harvest. Fur prices, those of beaver pelts in particular, are largely controlled by the overseas fashion market. In recent years the demand for beaver has been low; consequently, the price paid for pelts has fallen and so has the beaver trapping pressure. The out-



**By Joe Carlos**

**District Game Protector  
Cameron County**

come has been a dramatic increase in beaver populations, resulting in conflicts with man. Each year complaints about flooding of agricultural areas and roads increase, and a great deal of our time is spent live trapping and relocating these nuisance rodents.

It is ironic that at one time, before seasons and bag limits were in effect, the beaver was virtually trapped out in the Keystone State. In 1917, beavers from Wisconsin were restocked in the Cowley Run watershed, which is now part of Sizerville State Park. For the past two summers, Deputy Jean Smith and I have been removing beavers from the same area, due to conflicts with man. When I went on as a deputy in Clarion County in the early 1970s, game protectors were posting many beaver dams against trapping in an effort to protect them. Now each year prior to season I do a news release or radio program advising trappers on locations where beavers are in abundance. It just goes to prove that nothing in wildlife management remains static.

*February 11*—In the morning I dropped off deer hides at Game Protector Don Zimmerman's headquarters. During the colder months of the year game protectors collect, salt, and store deer hides from roadkills, deer shot for crop damage, and illegals. In late winter or early spring the hides are all taken to a central location where buyers

can examine and bid on them. Revenue from the sale of these tens of thousands of hides is deposited in the Game Fund to help carry out the Commission's many programs.

Later in the morning I helped members of the Mountain Country Sportsmen's Club stock snowshoe hares which they purchased from a source in New Brunswick. The club is hoping to reestablish populations of this fine game animal. An over population of white-tailed deer has hindered the snowshoe hare recovery in past years.

This afternoon Commissioner Taylor Doeblor, Chairman of the House Fish & Game Committee Russ Letterman, and I attended a wild game dinner at the Mountain Country Sportsmen's Club. Biologist Bill Shope, who works on the allocation of antlerless deer licenses, presented a program on deer management after the dinner. Also attending were Willis Sneath, Director of the Northcentral Region, Land Management Officer Jerry Becker, and Deputy Game Protector Larry Mummert. Everyone was pleasantly surprised when two additional guests arrived: Chief of the Bureau of Game Management, Dale

Sheffer, and the Game Commission's Executive Director, Peter Duncan. After the program the panel of experts answered a wide variety of questions. Members of the club seemed genuinely thankful that such a distinguished group would be interested in their problems.

Deer management is a complex subject and we are sure that not everyone attending understands it fully. Further explanation and clarification will be a large part of my job in the months to follow. It will also be part of the deputies' responsibility, as I have made this a mandatory training session for them.

*February 12*—A warm afternoon. Bureau of Forestry Foreman Charlie Baker and I were on the track of a bear, hoping to locate his den. I am one of Gary Alt's cooperators in the black bear research project, and we hope to tag and process the bruin. After several hours of tracking we find that the bear has crossed thin ice on Bennett's Branch of the Sinnemahoning Creek, so we abandon our effort.

*February 15*—I attend another session of the forest fire fighting course.

*February 16*—At a meeting of Trout Unlimited, I reported on the past hunting season, condition of game, and recent Commission developments and activities.

*February 17*—Spent the morning with Bureau of Forestry Foreman Ralph Harrison and Elk Research Assistant Rawley Cogan, hoping to radio collar an elk. No animals were sighted, however.

*February 18*—Received a most generous contribution of over two tons of grain from Ray White, an Armstrong County farmer. Steve Dechant from the Food and Cover Corps and I distributed it among the local sportsmen's clubs and members of the Turkey Federation for winter feeding.

*February 19*—Met with Deputy Jerry Sasala for his annual evaluation. Afterward I moderated a course in the use of force. Each of the older more experienced deputies was given a reading assignment, prepared a lesson plan, and presented a portion of the course. This gives them a chance to actually become involved in the instructional process, resulting in a better understanding of the material, and is a welcome change from the more traditional

---

**JACK HIRSH, Loyaltown, dropped this Tioga County buck with a 15-yard shot from his 44 Magnum handgun.**





role where the game protector does all the lecturing.

*February 22, 23*—Partly as a result of the meeting at Mountain Country, the staff in Harrisburg has realized that the average sportsman of our state really doesn't understand our deer management program. As a result it has been decided to form a task force of game protectors who will be qualified to further explain what the Commission is doing to manage the whitetail. Due to my interest in the subject and background in forestry at Penn State, I was chosen as one of three officers from the Northcentral Region. We were given two days of intensive training at Harrisburg, and I was pleased to see my friend Jack Payne, the wildlife extension specialist from Penn State, on hand to help in the instruction.

*February 26*—Met with Deputy Jean Smith to discuss her evaluation. Afterward we conducted a study session for applicants who will soon be taking the test to become commissioned as deputy game protectors.

*February 27*—In the morning District Game Protectors Harold Harshbarger, Leo Milford, and I supervised a group of high school students as they pruned apple trees on the Game Lands. Their work will result in increased fruiting, providing additional food for wildlife in the years to come. Later, Elk Research Assistant Rawley Cogan and I attended a dinner meeting of the Emporium Men's Club, where Rawley presented his slide program on the elk.

*February 29*—Attended another session of the forest fire fighting course.

## Books in Brief . . .

(Order from publisher, not from Game Commission)

**Trap & Skeet Shooting**, by Art Blatt, DBI Books, One Northfield Plaza, Northfield, Ill 60093, 256 pp., softbound, \$10.95. This is billed as a "guide to the clay target sports," and it more than lives up to the claim. After some historical background, Blatt discusses numerous competition shotguns and gun fit, then gets into the fundamentals of trap and Skeet shooting, explains the options, purses and payoffs that are so confusing to new competitors, and even gets into methods of preparing for tournaments and international-type shooting. More than helpful for new claybird shooters, and a lot of oldtimers will learn from it too.

**Venison: From Field to Table**, by John Weiss, Stackpole Books, P.O. Box 1831, Harrisburg, Pa. 17105, 365 pp., \$24.95. Summed up simply, this is all anyone needs to know about preparing and cooking venison. From selecting a tender deer on the hoof to a large choice of recipes, Weiss covers it all—how to take care of a deer in camp, get it home, hang, age and skin it, how to butcher it into conventional cuts plus instructions on grinding deerburger and making sausage. Along the way there are notes on shooting, field-dressing and getting your buck out of the woods, plus taxidermy hints. There's no point in anyone else writing about this subject; Weiss has covered it.

**Power Swaging**, by David R. Corbin, PO Box 2659, White City, Oregon 97503, 190 pp., quality softbound, \$9.50. A textbook on power bullet swaging, this volume goes into the math of both hand and hydraulic or pneumatic power operated loading and swaging presses. Many charts, computer programs and formulas for design engineers. Primarily for the advanced handloader.

**Shooter's Bible**, 1985-No. 76, Stoeger Pub. Co., 55 Ruta Court, South Hackensack, NJ 07606, 575 pp., softbound, \$12.95. "Roaring Wings," by Don Lewis, "The How-To of Cartridge Collecting," by Bob Steindler, and "The Lure of the Luger," by Dick Eades are among the excellent articles in this big new edition of a long-popular shooters' reference. And of course there is a well illustrated catalog section covering most anything related to firearms. **Shooter's Bible** has been required reading for guncranks for decades.

# Thornapples



*Chuck Fergus*

**F**IRST DAYS are days of jangling nerves and rekindled feelings and odd, quick flashes of déjà vu.

Last Saturday—the first day of grouse season—I was walking through a grouse cover near my home. I like to hunt this place on opening day, because I often come upon young birds there, and feel confident that I can bag one. On this most recent first day I picked my way through shrubs still thick with leaves, feeling an unaccustomed tension in my left forearm from balancing a shotgun, listening for the sudden flushing of wings. Instead, I heard drumming. The steadily quickening beats came from a tangle just ahead. They told me that a male grouse, a mature bird, was feeling his oats—tricked into calling for females by autumn days that had shortened to the same length as those in spring, the time of breeding.

I worked my way toward the sound, avoiding the thorny rose canes, feeling for sticks, rocking my weight from heel to toe along the outside edge of my foot, one foot and then the other, stopping with my left forward, in position to shoot; and stepping again. I drew up before a tall aspen whose leaves twinkled yellow against the blue sky. I smelled leaf-rot, felt the sun on my neck. An uncanny feeling swept over me. This had all happened before. First day, two, maybe three years ago: A porcupine sat in this tree, and I felt hot

and sweaty, and I watched the porcupine watching me, its quills creamy against the brown fur, and then I walked ahead and killed a grouse.

There are just two first days for me, the first day of grouse and the first day of buck. I have hunted other first days, but, in general, they have not turned out quite so memorable as the first days of grouse and buck. I do remember a first day of bear, when I dawdled through the frigid Sullivan County woods, wondering all the while what I was doing there, finally realizing I did not want to kill a bear, unloading my rifle, and continuing my stroll.

I remember a good first day on pheasants. I was standing next to a rusty green jeep, kicking my boots in the frosted grass, waiting for nine a.m. Around the hunting cover, other people stood waiting. They opened and closed their shotguns (the click of the opening and the chock of the closing came to us across the frosty fields), they shut car doors, they talked. We heard a pheasant cackle, far away. Finally somebody slipped into the cornstubble. He stopped and looked around. Another man followed. It might have been a minute early, but it was the first day. Cockbirds were plentiful that year; I remember later, sitting against a stone foundation, eating an apple, a big pheasant lying lustrous and ruffled and stiff in the grass before me.

First day of rabbit season (coincidental with the first day of pheasant season) used to be fun when I had a dog, although the crowds of hunters sometimes gave me pause. The dog was small, and she trailed pheasants without tonguing, and once I saw a man tracking her with his eyes as she crept through the brush. I called her in, knowing she wouldn't come (I could never call her off game), and knowing that the other hunter would hear.

The best way to hunt squirrels is to be in the woods before dawn. I have memories of first light on first days, when I heard turkeys flapping out of the trees in which they'd roosted, deer rustling past, squirrels scrabbling down



trunks or thrashing from the top of one tree to the next. One first day of squirrel (also the first day of grouse), I sat under a leafy oak from which flew eight grouse, one after the other. I sat there holding the 22 and wondering why I had decided to bring it, why I had chosen squirrels over grouse that particular opening day.

I have pictures of the first days in my mind. I see myself walking quietly through the squirrel woods and coming upon a grouse sitting with its back to me in a tree. I see the way it turns its head from side to side, how it hunches to take off, how my shot transfixes it, how it plummets to the ground and hits with a thump. I remember a first day — I am leg-weary and hot and scratchy, clumping toward the tapering end of a patch of weeds — when my partner tells me “Don’t get too loose.” The stalks rattle, too much for the breeze, no, not a rabbit, as a pheasant hauls itself into the air, cackling. We shoot at the same time. The pheasant seems suspended in the air, and then it comes down writhing, gold and green and brown feathers drifting, and is dead when it hits the ground.

A thought that often comes to mind on a first day is that the maximum number of creatures is out there waiting. Most of them are young and inexperienced; later, they will be fewer and less inclined to let the hunter within range before running or flushing or going to ground. It pays to get out early and hunt hard the first day.

I remember a first day of grouse, an October Saturday when, during the course of eight hours, it rained; sleeted; was sunny; and snowed. I hunted up a narrow hollow, old pasture land given to crab apple and sumac and dogwood. I spotted a grouse (obviously a bird of the year) perched in a tree. It spotted me and, removing from my shoulders the responsibility of deciding whether I should pot it sitting, took off. I guess I had already made my decision, because the gun was up and pointing, and all I did was slap the trigger. The right barrel folded the bird. It fell in the

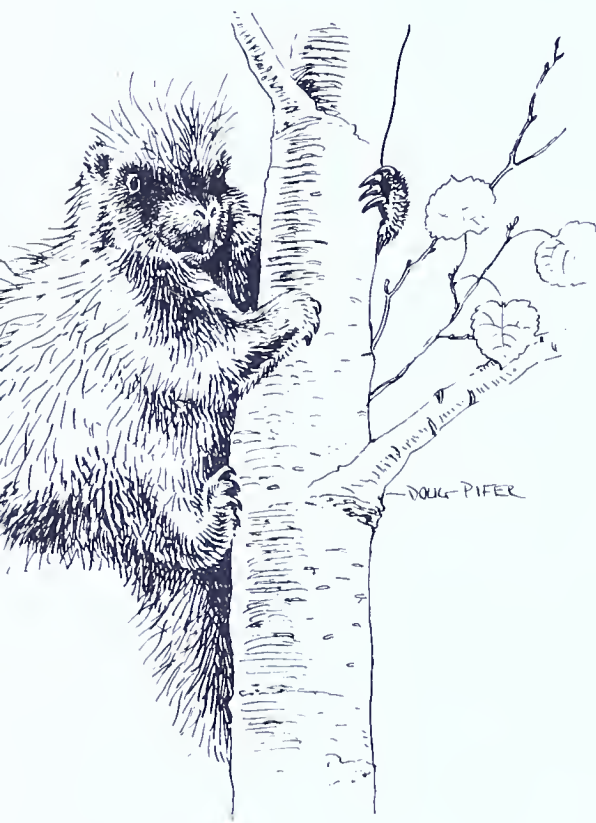
bright wet leaves. I edged toward it, along the slope of the hollow. I’d gotten within ten yards when a fox (obviously a fox of the year) leaped out from the same bush that the grouse had been sitting in, and grabbed the bird. I stood with my mouth open. The fox trotted uphill, head high. I took a step, slipped, landed on my rear end. I shouted, “You such-and-so, that’s *my* grouse!” He dropped the bird, and without looking back, ran.

If the first day of grouse can smack of vaudeville, the first day of buck can be awesome. I remember one first day when I woke in the dark and drove north with a friend; in that cold, quiet





time, the car radio bleating nonsense, the periodic house lit with activity, the cars moving slowly down narrow side roads, I found myself thinking how nobody could stop the first day of buck. No matter how powerful they were, no matter how much they tried, at this point nobody could keep the first day from happening. Events had been



launched. An army moved in the night. All over the land—in the mountains, the deep woods, the fields edged with trees, hunters were gathering. I thought about what would come—the dull booms, the strings of shots, the *halloos* that would echo when the drives swept up the hollows. Across Pennsylvania, the first day of buck is a day unlike any other. Schools close and factories shut down and almost nobody goes to work.

The first day of buck, I never know what I'm going to see. There are so many people in the woods that the

wildlife gets pushed out of normal patterns and goes blundering around meeting humans. I've had foxes walk right up to me. Past my stand have run bears, skunks, opossums, flocks of turkeys. I am on constant alert, wondering what will show up next—my buck? There's a tendency, what with game running helter-skelter, to dwell on luck; on the first day it is often luck and luck alone that sends a buck to the hunter when his friend is standing a hundred yards away. Sometimes I think about that certain buck that has my name on it. If I don't see a buck on the first day, I worry that luck has left me, perhaps for the season. It's not a rational worry, and I try not to let it get me down. Later, when the crowds thin out, hunting hard may yet get a buck. On the first day, though, some people pray.

The weather on the first day of buck is not to be predicted. I remember first days when deep snow covered the ground. I remember first days when rain drummed the fallen leaves, when fog hid the laurel and clumps of foam shone at the butts of trees. (I remember missing a long offhand shot at a truly big buck in driving rain; why I didn't take advantage of all that background noise—drops drumming, branches creaking in the wind—to stalk closer or to take a solid rest, I'll never know.) I remember other first days when the stars looked freshly washed in the late-night sky, when dawn came cold and rosy, with a hush so deep over the land that the first shot made me jump.

On a first day long ago, when I was new at the game of hunting, I was sitting on a rock outcrop watching for deer. Deer. *They materialized all around me.* Had I been dozing? I forced my head to move like a turtle. A dozen deer, at least. No buck among them. They heard something, pricked up their ears. A few stamped their forefeet. Then they were off, tails switching brightly against the drab leaves, gray-brown coats vanishing between the somber trunks. I felt all alone.

One fall, after I had been hunting for

several years, I didn't go out on the first day. In the weeks before buck season I had asked myself if I wanted to kill a deer, and the answer had been no. The first day, I slept late. I got out of bed and made breakfast. The house was silent and stuffy, cold. Standing at the door, I could hear shooting in the distance. I felt like a goose that had stayed on in the North when his band left; snow coming, ice rimming the water, a sky bleak and dreary. I got in the car and drove. I drove down a muddy road through scrub oak woods. Snow lay in patches, and the sun was wan behind thin clouds. I pulled off and stopped, opened the window halfway. The popping of shots drifted in. A doe, displaced by the ruckus, walked slowly through the woods. She crossed in front of the car. Moments later, a fat man in a red coat came huffing down the road; an orange plastic cushion swung from his belt at the back, and he swiveled his head back and forth.



I felt embarrassed, and left out, and unsure of why I had come looking. I rolled up the window before he could ask me some fool question. I started the car and drove home. The next year, I asked myself if I wanted to kill a deer, and the answer was yes. I knew I would be in the woods before dawn, as far in the woods as I could get, alone and waiting for the first day.

GAME NEWS

Enclosed find check or money order for \$..... for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW

☐ RENEWAL

ACCOUNT NUMBER

(Check One)

☐ 3 Years \$16.50

☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

GAME NEWS Binder (Holds Twelve Issues of the Magazine)  
☐ \$3.50

Name .....

(print plainly)

Address .....

City ..... State ..... (Zip Code) .....

NOTE: All remittances should be made payable to the  
PENNSYLVANIA GAME COMMISSION  
Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
DO NOT SEND CASH  
Please allow 60 days for first copy.

# Color Combinations

By Keith C. Schuyler

Photos from the Author

ON THE SECOND Saturday of the past regular deer bow hunting season, I was comfortably ensconced up the side of the Tuscarora Mountains in southern Pennsylvania when I heard a turkey call. It was a halfhearted gobble that trailed off into an unenthusiastic *kak, kak, kak*. After some more turkey talk, a gobbler stepped carelessly into view at about 50 yards. He pecked around aimlessly for ten minutes or so, gobbling once more, before he meandered on up the mountain.

Beyond him, hidden over a rise, was a mouthy hen and what sounded like several young turkeys.

## Reds And Blacks

Aside from the always thrilling experience of seeing one of our wariest birds, there was nothing special about this encounter, except—I was standing in full view with an all-red-and-black camouflage suit for cover. My plan was to sight a deer coming diagonally up the mountain from the opposite direction. My partial concealment was planned accordingly.

Now 50 yards is a long way from the 20 that I would personally need to place an arrow in a target the size of a turkey gobbler. But it made me wonder just how close the old fellow might have come in my direction amid the trunks of wide open pole timber and medium-size trees.

The red suit, tattered remains of three, was patched together, “for the last time,” by my helpmate, and I doubt that I can find another. This one came from a store on an army base at Fort Rucker, Alabama, in 1975. They were glad to get rid of them at half price.

My first association with the red

camouflage had come back in the '60s as an experiment. If deer are color-blind, as reputed, I figured the black splotches on red should provide sufficient blend of color to mix with the usual autumn foliage and conceal a person's identity as such. After all, gun hunters had been wearing the popular Woolrich red-and-black plaid, and similar garments, successfully for years. Personal experience had indicated that a plain expanse of any color would tend to draw a deer's attention, and its subsequent visual inspection at practical bow ranges would usually cause it to flee.

The red worked. And even though I had a conventional suit of predominately green camouflage mixed with yellow, brown, and black, I continued wearing the red for the regular bow hunting season. If unsuccessful then, I would still wear the red while hunting with the bow during the firearms season when its easy visibility for humans took on new meaning. In the late archery season, however, when the woodland stands stark against the rotting leaves of its floor, or trees become dark sentinels against a white background, a black or dark green coverall blends better against a tree or a tall stump.

In other states or Canadian provinces, when the season usually comes early for archers, I still relied on the red camouflage. It permitted me to take successful shots at mule deer, a black bear, a caribou. A moose and pronghorns paid me no attention. And here in Pennsylvania I found no fault with the suit against the wariest of all—the whitetailed deer. In fact, I have also worn it on a number of photography forays without any detectable difference





**A COMPARISON** of three different color camouflage combinations as seen in black and white is shown above. On the left is a primarily green suit, in the center is a fluorescent orange one, and on the right is Schuyler's red camo suit.

between it and other color combinations.

When competing against guns on some of these excursions, the red suit provided a certain safety feature not available with more conventional archery garments. It also added some measure of comfort when hunting during the final six days of the regular bow hunting season last autumn when turkeys were in season for both archers and gunners.

But the red suit is faded and even I wouldn't have the brass to ask anyone to try to put it back together again. Nevertheless, its obvious efficacy as a camouflage pattern has been proven to my satisfaction. And now the requirement of at least 100 inches of fluorescent orange during big game firearms seasons and for woodchuck hunting negates the use of a red-only garment during these sessions. A hunter must wear at least an all-fluorescent-orange headgear.

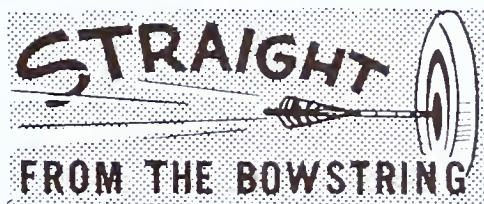
Several years ago a scientific study was made to determine if deer are really color-blind. Some evidence indicated that these animals can distinguish color. However, in my experience, a broken-

red pattern seemed to make no difference in their visual reaction. And this opinion was based on sixteen years of actual experience.

To carry this a step further, I obtained an orange, two-piece suit splotted with black from DEERSKIN, a Melton product. Although not fluorescent orange, this one will serve to identify a hunter to others.

I have been close to deer with this orange camouflage suit and it appears about as effective as the red pattern. Of course, I haven't been able to crowd the experience of many years into testing as with the old red standby.

My experience with orange is retained with a chuckle and a hat, of sorts, the result of a caribou hunt in the early '70s with Lou Stevenson and Harry Allaman, now both deceased. The weather had turned cold, and I was







THE DIFFERENCE between a nonfluorescent orange suit and brown camo hat on the left, and the dark green jacket and hat and lighter green trousers below are shown in the same setting.



without any headgear. I don't like hats, but Harry insisted I should wear something. We went shopping in Schefferville, in upper Quebec. All I could find was an orange, all-wool tam-o'-shanter. It lopped down on all sides like a pancake on a grapefruit, but I wore the thing and finally became attached to it—or vice versa. Anyway, after a few washings it shrank to the size of a beret. Now I feel naked without it. And it doesn't interfere with the bowstring.

The legal requirement of *fluorescent* orange under certain circumstances in some states presented a bow hunting problem, even though solid color suits were available in this color. My suggestion for the solid fluorescent was to break it up with splotches of some other color, without overdoing it to the extent that the final pattern would reduce the visible portion of fluorescence to less than the law allowed—an unlikely event.

Then I discovered the exact pattern I wanted in a suit of SAFTBAK, by KAP Outdoors, Philadelphia. The only drawback to this well made two-piece garment is that it is much too warm for the usual October bow hunting season. However, for the extended season in late December and/or January, when such

sessions are permitted, it is ideal from the standpoint of safety and in compliance with fluorescent orange requirements at any time.

With all these color combinations, it seemed a natural procedure to photograph them with black and white film to get comparative results. Despite the previously mentioned experiments which seem to indicate that deer, at least might be able to distinguish some color, evidence in the field seems to sustain the general belief that, if they can, it has little meaning to them. I enlisted my entire family to photograph the available hunting attire in various settings.

As to natural colors, an exception is fluorescent orange. It is one color that is not found in nature. Further, its light gathering qualities make it appear to reflect the color—at least to human vision.

The closest natural color that I have

found to fluorescent orange is in the autumn leaves of the common sumac after they have changed to brilliant reds and orange, particularly the stag-horn sumac. So, the first picture taken was of the fluorescent orange camouflage suit in a stand of sumac. All leaves of the sumac, as illustrated, turned fairly dark in contrast to the highly visible artificial color.

It must be assumed that fluorescent orange appears as an offwhite to any creature that sees only in shades of black and white. In itself, this is not necessarily objectionable. It would appear to me, nonetheless, that it would be better to imprint splotches of fluorescent orange on a black background rather than the reverse. To animals, such patches would then resemble leaves, but they would present the brilliant orange color so readily distinguished by the human eye.

The same might be suggested for the standard orange-base camouflage suit. Without knowing the imprinting problems involved, which might prohibit such a combination, it would seem a great advantage to have such splotches in actual leaf, weed and fern patterns.

Here we are considering autumn foliage, for the most part in those sections east of the Mississippi River.

An exception to all of this might be the normal winter scene in Pennsylvania when snow covers the landscape. Plain fluorescent orange might have advantages under such conditions — if animals see things as we do in black and white images.

To get a further comparison, a standard green camouflage with brown and black splotches, another in fluorescent orange, and my somewhat faded but still red suit were photographed in normal brush settings. There was little effort at concealment. Rather, subjects were stationed in relatively plain view. As expected, the standard “green” suit was least visible, the fluorescent suit, most.

To simulate a ground station in kneeling position, the plain orange camouflage suit was tested against the stan-



**THE WILD RESOURCE CONSERVATION ACT** of 1982 gives all Pennsylvanians an opportunity to actively support the protection and management of the state's wealth of natural resources. Modeled after the “income tax check off system” used successfully by 19 other states, Pennsylvania taxpayers may contribute all or a portion of their income tax refund to protect nongame wildlife and native plants. Much more can and needs to be done to protect our natural resources. So, when you're filling out your tax return, look for the owl and “Do Something Wise.” And if an income tax refund is not due, contributions may still be made directly to the Wild Resource Conservation Fund, P.O. Box 2063, Harrisburg, PA 17120.

dard green camouflage jacket and a faded green camouflage pair of trousers. As expected, the green again was least visible, but the orange came off surprisingly well.

In a final attempt for comparison, the red was tested against the plain, but camouflaged, orange. With allowance for the fact that the red suit has faded somewhat from repeated washings, again the plain orange showed up well as camouflage against a brush setting. Photos were also taken in heavy timber, but were eliminated, since none of the outfits scored well in the open setting.

What does all this tell us, if anything?





**A VIEW of red camouflage, left, and orange camouflage, right, provides a comparison when viewed as it's believed most North American big game animals see them.**

The comparisons resulted from readily available landscape settings. Countless natural color combinations and varied woodland and brush settings are encountered in a normal day's hunt with the bow and arrow. They vary from week to week as the season progresses. Accompanying scenes were shot toward the end of the autumn bow hunting season. No one camouflage pattern is best for all foliage situations. Few hunters can afford a suit to best fit each change.

What is presented here needs individual interpretation. No attempt was made to camouflage the individual person. We relied completely upon the gar-

ment to make the hunter as invisible to the animal as possible. Yet we cannot ignore, for those who wish to hunt through all seasons with the bow, the requirement to wear fluorescent orange in certain firearms seasons. These will be in the minority so far as bow hunting is concerned, but some hunters will opt for the brightest colors consistent with camouflage and safety regardless of the season.

The excellent safety record compiled by bow hunters would appear to encourage the best camouflage available regardless of color. Bow hunters, by their very nature, are reclusive. For the most part, they don't want people or animals to know where they are hidden.

But from the standpoint of safety, as the number of bow hunters increases, conspicuous color combinations will be much more important than they are today. If big game animals do see only in shades of black and white, this study indicates how you look to them in various combinations of color. If they can distinguish color but it doesn't matter to them, you have a choice.

## **New Outdoor Recreation Maps**

Did you ever have an urge to stomp through some new grouse coverts, explore an isolated mountain ravine, or take the family on an outing to see the fall foliage, but didn't know where to go? Now, to help you decide, the Game Commission is offering six new maps designed specifically for outdoorsmen. Each multicolor 24x36-inch "Outdoor Recreation Map" covers one of the Game Commission Regions (formerly known as field divisions). Featured are Game Lands, State Forests and Parks, and private lands included in the Commission's Safety Zone, Farm Game and Forest Game programs. Also depicted are municipalities, roads, waterways, and—giving the maps a three-dimensional appearance—100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from: the Pennsylvania Game Commission, Dept. AR, P.O. 1567, Harrisburg, PA 17105-1567. Individual State Game Lands maps are still available for 50¢ each, and can be ordered by number from the above address.

***With a Kleinguenther K-22 or a Ruger 77/22,  
it's easy to . . .***

# ***Beat the February Doldrums***

**By Don Lewis**

**Photos by Helen Lewis**

**“I’M GOING TO** give it a try,” I told Helen as I zipped my heavy jacket. “Things may have improved.”

“Things haven’t improved one iota and you know it,” Helen said. “Take another look at the thermometer if you think I’m kidding. You can’t wait to shoot the new varmint outfit no matter how bad it is outside. Just be patient for a few more days.”

I knew she was telling the truth, and a check of the porch thermometer showed a minus-3 reading. Worse yet, wind was whipping squalls of snow across the yard, literally blanking out my shop not fifty yards away. Still, I wasn’t giving in to February and her cantankerous moods.

I finally got all the gear to the range, but I was so cold I spent a half-hour in the shop getting warm. Minutes later, I was set up at the benchrest, complete with spotting scope, sandbags and new rifle. But I was in for a surprise when I reached for the ammunition. The plastic shell box cover refused to move, no matter how hard I pulled on the inside box. The bitter cold had stiffened the plastic to the point of brittleness, and the two halves were literally frozen together. I struggled another minute or two, but to no avail. I finally recalled that this particular ammo box was hard to take apart even on a hot August afternoon. I knew I was licked. I would have to be patient whether I wanted to or not.

February might be the shortest month in the number of days, but to the hunter or shooter it’s very long. Winter may be winding down somewhat at the end of January and the warm winds of March are just over the horizon, but February is still a month to reckon with. In a sense, it’s a transition month between winter and spring, but there’s nothing to hunt, and the bitter cold and whistling winds dampen any desire to head for the range.

It’s a time for reflection, gun cleaning or planning the year ahead. In fact, even though February is nine months from squirrel season, it’s really not too early to take a comprehensive look at several new topnotch squirrel outfits. Either of these rifles should quicken the pulse of the avid squirrel hunter. This might be a sneaky way for me to give a rundown on the Kleinguenther K-22 and the Ruger M77/22, two new rim-fires especially suitable for the squirrel hunter.

**SQUIRREL** hunting with a top quality 22 can be as challenging as any type of hunting. Lewis took this bushy tail with the Kleinguenther K-22 topped with a Leupold 8x.





I consider these rifles topnotch squirrel outfits because each is superbly accurate and, to me, that's the heart of any good rifle. I have said it several times in this column, but it bears repeating that a good rifle is an accurate one.

Before getting involved in the makeup of each rifle and its range performance, maybe I should attempt to convince a large segment of the squirrel hunting fraternity of the importance of having a super-accurate rifle topped with a high-quality scope. More than a dozen times throughout the year I have this question tossed at me: "How can you justify spending a large chunk of hard earned money on a 22 rimfire and scope just to hunt the insignificant gray squirrel?" That's a tough question to handle, but let me delve into this subject a little deeper.

First, I can't recall suggesting that only expensive rifles are accurate. One of the most accurate 22 rimfires to cross my benchrest in 25 years of shooting was a Mossberg Model 144 target rifle,

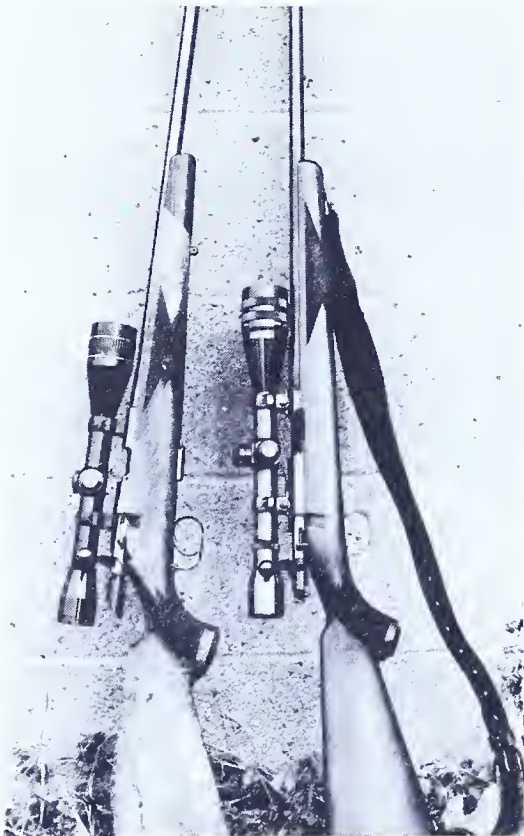
and it cost about \$32 back in 1952, which was far less than other target outfits of the day. I have always suggested giving any rifle a fair test from the benchrest with a half-dozen brands of conventional and target ammo before discarding it as a squirrel outfit. However, some of the basic requirements for accuracy, such as tighter locking bolts, adjustable triggers and just better workmanship in both the wood and metal, normally come in the more expensive rifles.

### On Target With First Shot

I have stated a number of times that I want my squirrel rifle to be on target with the first shot from a cold barrel. Cold in this case doesn't necessarily mean ice cold. Maybe I should just say unheated. I have the same feeling about a varmint outfit. The reason is that the squirrel and chuck hunter seldom gets more than one shot at a given animal. Another factor is the squirrel and varmint hunter should make the first shot count. The varmint and squirrel shooter doesn't take running shots. This type of hunting requires patience and the ability to wait until everything is in your favor. Under these conditions, one shot will be all that is necessary if the hunter knows his rifle and has it properly sighted in.

I have to admit that not too many rifles will be dead center from an unheated barrel, but in this case I count close as being more than just a measurement in horseshoe pitching. Let me put it this way.

I think a squirrel 22 rimfire outfit should be able to keep five consecutive shots from the benchrest in one inch or less at 50 yards. This doesn't mean all shots have to be in one hole, but the tighter the group, the better the rifle. I have learned from testing hundreds of 22 rifles of many vintages, makes and models that the first shot from the



**HERE'S** a side-by-side comparison of these two rimfires, the Kleinguenther K-22 on the left—note the beautiful wood—and the Ruger 77/22 with a Weaver KT-6 on the right.



cold barrel is unpredictable in the vast majority of rifles. This problem exists in all makes, models and price ranges of rimfires.

I have a very fine rimfire that throws the first shot from the unheated barrel a full inch from where the other four bullets will impact. It isn't even consistent where the first shot impacts with the same brand of fodder. Some go high, other first shots land low or wide. But you could bet your best hunting knife that subsequent shots will be back on center and stay well under an inch. It's perplexing to say the least.

I am not sold on the idea that glass bedding is a cure-all for the accuracy woes of a rifle, but if things haven't changed after exhausting several other ideas, the final step will be to resort to glass bedding. As things stand at the moment, this outfit doesn't qualify for squirrel hunting.

How do you justify sinking \$498 in a Kleinguenther or \$275 in the Ruger? To compound the situation, when a hunter goes for that type of quality, it's unlikely he will settle for a \$30 rimfire scope—which means something in the neighborhood of \$200 will be invested for the optical sight. You don't have to be good in math to see that a high quality squirrel outfit can cost from \$500 up. That's not a small expenditure anyway you look at it, and this writer isn't implying that the special squirrel outfit is for everyone. The small game hunter who considers squirrels as something to hunt when other game species are low won't be a candidate for one of these outfits.

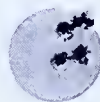
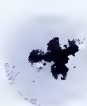
The first requisite is to have a genuine desire for accuracy. I guess the hunter who has this desire fits into the philosophy of the benchrest shooter who think only in terms of accuracy. During my younger days as a hunter, I really didn't know much about accuracy and felt it was dishonest to use a scope even for target practice. If I could hit the bottom of a condensed milk can at 75 feet, I figured the rifle was accurate and that was good shooting. I knew nothing about groups or how to find

the accuracy potential of a rifle. When I connected on a gray in the crown of a 60-foot oak, I had to find out first where the bullet hit before I could tell my hunting partners where I had aimed. That may be hard to believe, but it's a practice that is still alive and well today in both small and big game shooting.

There is a feeling about owning an accurate rifle that is hard to describe. Maybe it's the confidence it builds in the hunter. In fact, the super accurate squirrel outfit has made me a competitor with myself. I don't want the run-of-the-mill wide open shot at 20 yards. That's not a real challenge for a rifle that can cut consistent dime-size groups at 50 yards, nor is it much of a challenge for a hunter who warmed up for two weeks prior to opening day shooting fifty or more 5-shot groups. The hunter with a tack-driving squirrel rifle is looking for a challenge, not a setup. That's not being egotistical or giving a slap at the hunter who doesn't have this type of squirrel rifle. It's a transition that takes place in the hunter automatically. It isn't something the hunter spawned; the inherent accuracy of the rifle alone is the motivating factor.

**THESE two rifles produce where it really counts—accuracy. Don shot the K groups and Helen shot the R groups.**

K



R

Getting right down to brass tacks, there are many expenditures we make that can't honestly be justified. Fifteen hundred dollars for a 3-wheeler to haul feed to the steers is a questionable investment, especially when 200 miles of joy riding over the farm will be put on it for every mile it hauls hay or feed. Or how about the fellow with a half-acre lawn going for a 48-inch mower hooked to a 16-horsepower riding tractor? That'll take care of a couple thousand smackers in a hurry.

Let's face it; we don't need justification if we are getting something that will bring some extra pleasure into our lives. Instead of trying to prove a very elusive point, let's get down to business and take a look at the new Kleinguenther K-22. First, it's a very attractive rifle from West Germany. On the technical side, the barrel is chrome-moly steel with 4 grooves and a constant righthand rifling. Barrel length is 21½ inches. Two locking lugs on the front of the bolt lock into a Stellite insert just like the setup on the famous Kleinguenther K-15 centerfire outfit. This provides a positive and very strong lockup of bolt to barrel. Bolt handle works on a 60-degree lift.

Trigger assembly is adjustable and identical to the K-15's. For an extra \$125 a double set trigger is available. I doubt if that is needed on a squirrel outfit as the conventional trigger weighed out at

3 pounds right from the factory and was free of all creep and overtravel.

The K-22 is manufactured by Voere in Vohrenbach, West Germany, in the famous Black Forest where the Danube River begins its long journey. The standard version is furnished with a walnut-stained beechwood stock and matte-finished blued steel. It really is designed for field use. It lists out around the \$366 mark, minus sights. The receiver is grooved for easy scope mounting and open sights are available. The deluxe version lists at \$498, due to the high-luster bluing and walnut stock. There are a lot of stock options.

Kleinguenther says it does not guarantee the accuracy of the K-22, but each rifle will be required to place 3 shots within an inch at 100 yards more than once before it leaves the Seguin, Texas, plant.

My test outfit arrived in the deluxe version, complete with an 8x Leupold scope, a box of Eley Tenex ammo, and a 50-yard target showing one ¾-inch 5-shot group.

I don't want to get carried away, but I got superb accuracy from the K-22 with Eley Tenex target ammo and Federal 711 low velocity fodder. The trigger is clean and crisp, and ignition lag time is reduced considerably due to the short striker travel distance. This Kleinguenther shows superb workmanship and material and is incredibly accurate. So much so that Helen decided it was just what she needed for the past squirrel season. I just can't win!

With its \$275 list price the Ruger 77/22 doesn't bite as deep in the pocket-book. That's not bad considering that some of today's top line rimfire outfits run nearly twice that amount. Nevertheless, the new 77/22 is exceedingly well made, with excellent lines, and meets every accuracy requirement of the most demanding squirrel hunter.



**THE 77/22, which dropped these two grays, will certainly please the squirrel hunter who wants a top quality rifle at a reasonable price.**



The Model 77/22 looks so much like the popular Ruger M-77 centerfire outfit that at first glance it can be mistaken for its larger brother. Stock is American walnut and has the same distinctive straight-comb lines of the M-77.

I have been suggesting for years that a top line rimfire outfit deserves a top line scope. Unless you get into a target-type scope, there's no choice but to use a conventional big game rifle optic. Ruger must have had similar feelings, for the 77/22 has the same one-inch integral mounting system that is used on the centerfires. One noticeable difference on the 77/22 is that the rear base has two mounting slots to give a little more latitude for eye relief. With certain scopes, this is a big help.

The bolt is a heavy duty type with two locking lugs near the middle instead of up front. This is a very strong setup and assures a tight fitting bolt. Depressing the bolt stop on the left side of the receiver allows the bolt to be removed for bore cleaning. Disassembling the bolt is fairly simple and shows a unique design. I'll refer you to the instruction manual for working on the bolt.

I have never been a firepower addict, and normally a 10-shot magazine turns me off. One thing I don't want on my squirrel rifle is a detachable magazine (clip) that protrudes for an inch or more out of the rifle. Ruger solved the problem by using a rotary 10-shot clip that fits flush with the bottom of the floorplate. Admittedly, there is a gaping hole when the clip is removed and the stock is rather wide at that point, but I soon forgot about these things when I began to appreciate the advantages of this type of clip. It certainly took a lot of work out of range testing.



I didn't run a lot of range tests with the 77/22, but in two group shooting sessions I cut less than an inch at 50 yards with both Eley Tenex and Federal 711 low velocity ammo. I did have a flier now and then that couldn't be explained, but I'm satisfied the 77/22 will please the squirrel hunter who wants a quality rifle at a reasonable price.

One thing that didn't suit my fancy on the Kleinguenther was the protruding clip. It extends about 1/4-inch, which isn't all that bad, but the magazine release is in front and pushes rearward to release. It could be accidentally disengaged while carrying the rifle over the forearm, releasing the clip.

My only complaint on the 77/22 is the non-adjustable trigger. The pull on the test model has a solid feel but hit 70 ounces (four pounds six ounces). This is not bad for a factory production model, but an adjustable type trigger would have added a lot to this quality rifle.

I haven't tried to cover all the bases concerning these two excellent rimfires. I really just want to make the dyed-in-the-wool squirrel hunting buff hungry — hungry for a top of the line rimfire that puts all its shots inside an inch target 50 yards downrange. Not just occasionally, but time after time. That's what the Kleinguenther and Ruger 77/22 will do. Come to think of it, Helen and I are going to be hard pressed for alibis this year.

## Thoughts While Walking

*If you see ten troubles coming down the road, you can be sure that nine will run into the ditch before they reach you.*

—Calvin Coolidge



# *In the wind*

bob mitchell



**The Wyoming Game and Fish Commission has recommended a plan that would prohibit the use of lead shot, not just for waterfowl, but for all small game hunting, by the 1986-87 hunting seasons. Citing data indicating lead pellets were found in some areas at 2½ times the level at which lead shot poisoning die-offs occur, the Commission felt obligated to completely phase out the use of lead shot before a major disaster occurs.**

According to the Wildlife Management Institute, in 1983 there were 7180 state wildlife law enforcement officers, representing 32.5 percent of the total number of state wildlife agency employees. On the average, each officer was responsible for a 435-square-mile area. Funds budgeted for law enforcement exceeded \$275 million, comprising 30 percent of the agencies' budgets. Conservation officers averaged 71 arrests per year with a 93 percent conviction rate. Also reported was that over the past 16 years, there was an average of 2.72 assaults per 100 officers per year, meaning an officer has an 82 percent chance of being assaulted during a 30-year career.

Because they felt there was not enough scientific data to justify an antlerless deer season, a group of hunters petitioned a Vermont court to disallow the hunt. The court ruled in favor of the state's antlerless deer season, but some suspect there may be more attempts to have deer management authority moved from the state's wildlife agency to the state legislature.

**Fifty hunters were selected from 45,900 applicants for Michigan's first elk season in nearly 20 years. Each applicant paid \$4 to be eligible for the license drawing, and each of those selected had to purchase a \$100 license. Department officials issued 10 bull licenses and 40 cow and calf tags.**

For the first time in 50 years the endangered Delmarva peninsula fox squirrel can be found in Delaware. Six were captured recently in Maryland's Blackwater National Wildlife Refuge and released in Delaware's Assawoman Wildlife Area.

The Bureau of Land Management, the nation's largest resource agency, is doing very little for wildlife on the public lands under its jurisdiction, according to the National Wildlife Federation, which says the BLM is managing for wildlife on only 27 percent of the 270 million acres and 2 percent of the 340,000 miles of streams it's responsible for.

Nearly 70 bald eagles (the largest concentration of eagles ever recorded in New England) spent the winter of 1983 at Maine's Moosehorn National Wildlife Refuge. The eagles were sustained by over 37 tons of carrion placed at three feeding locations established on the 22,665-acre refuge. The feed was donated by several meat processing companies, and considered by biologists to be especially beneficial to the eagles because it was known to be free of contaminants.

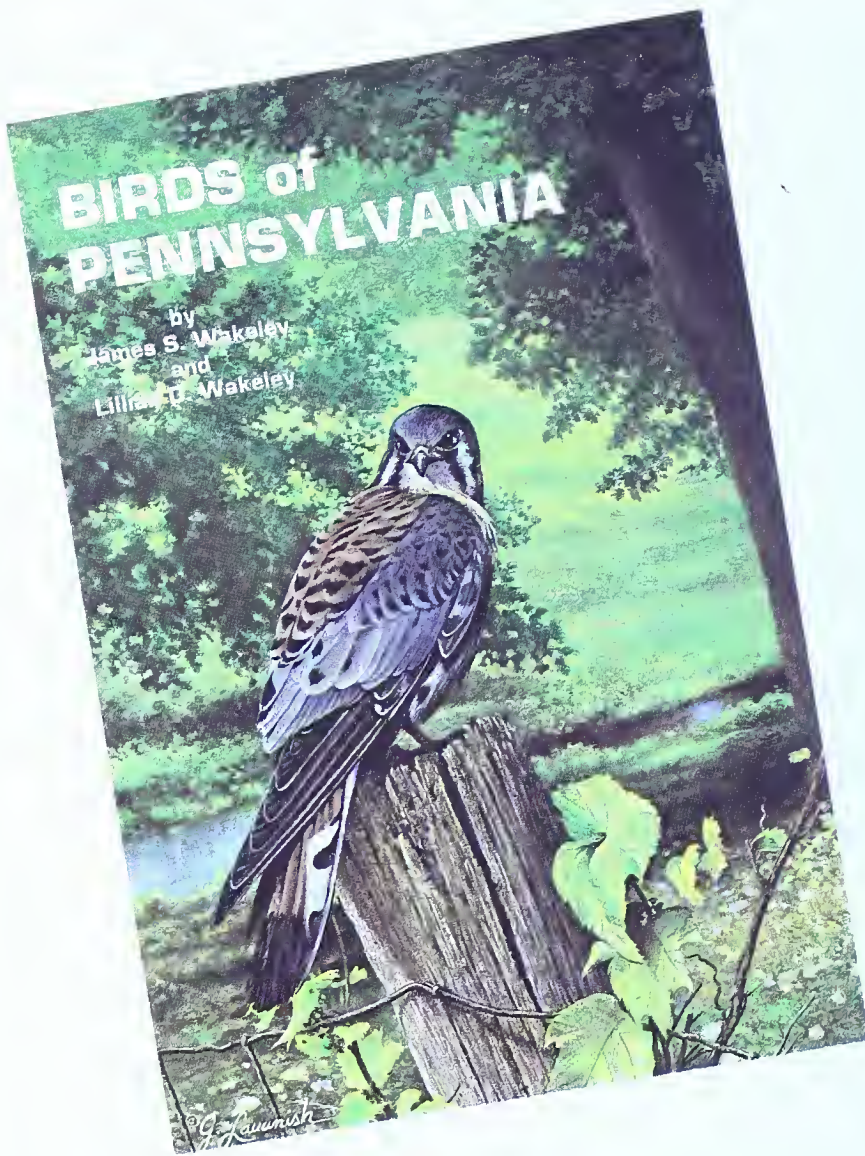
In just one day over 2250 volunteers collected 26 tons of plastic wastes from 150 miles of beaches in Oregon. The drive to clean the beaches of fishing line, six-pack rings and styrofoam coolers was initiated by the state's Department of Fisheries and Wildlife after representatives attending the recent Western Association of State Fish and Wildlife Agencies annual meeting heard researchers talk of all the deaths and injuries these items cause to wildlife.

The New York Department of Environmental Conservation has established a Helicopter Emergency Air Rescue Team (HEART) made up of 12 forest rangers. The specially trained team is charged with aiding or rescuing injured or stranded persons from remote areas, fires, floods and other emergencies.



*Big Woods Bobcat*, by Ned Smith, is the third limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with the previous features, this edition is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Cost of each print is \$125, delivered; framed prints are available for an additional \$97.50. Those who purchased the first two Working Together for Wildlife prints, *River Otters* and *Dutch Country Bluebirds*, can request a matching number for *Big Woods Bobcat*. Orders should be sent to the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567.





*Birds of Pennsylvania: Natural History and Conservation*, a completely new book by Jim and Lillian Wakeley, includes the most up-to-date information on bird biology and behavior, and the kinds of birds commonly found in the state, arranged according to the type of habitat where they are most likely to be seen. This 214-page hardcover book, supplemented with 40 full-color pages featuring the Game Commission's popular bird charts and previous GAME NEWS covers, is being sold for \$10, delivered.

Make check or money order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**  
P.O. Box 1567  
Harrisburg, PA 17105-1567



# PENNSYLVANIA GAME NEWS

MARCH, 1985

60 CENTS





*Big Woods Bobcat*, by Ned Smith, is the third limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with the previous features, this edition is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Cost of each print is \$125, delivered; framed prints are available for an additional \$97.50. Those who purchased the first two Working Together for Wildlife prints, *River Otters* and *Dutch Country Bluebirds*, can request a matching number for *Big Woods Bobcat*. Orders should be sent to the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



# Questionnaire Update

FOR THE PAST two months, everyone on the GAME NEWS staff (all three of us—Mitch, Betsy Maugans and I) spent every spare minute opening questionnaires. You remember the questionnaire, right? A lot of you must. We don't have a count of returns, but it looks as if 12,000 to 15,000 of you took the time to fill out and send one in. Our first chore was to get them opened so the Circulation Department could extend your subscriptions, as agreed. That in itself is going to take awhile, for the work has to be fitted into whatever time is available during ongoing operations. We have no extra help, just the four regulars—Libby Williams, Dolly Fronk, Betty Ashenfelder and Kim Coover—and at the moment Libby is nursing a broken arm. Regardless, everyone who responded will get what he has coming.

Besides returning the questionnaire, several thousand of you included letters, some short, some of several single-spaced typewritten pages. We won't be able to answer all of these individually, but we are reading them. We appreciate your interest, and your input will have an effect. Perhaps the most practical way to get back to you is to sort of absorb your questions and comments and write an article of general response. That way, everyone will have a chance to benefit. That's one reason we ran the questionnaire in the magazine instead of just mailing it to a cross-section of readers—which the statisticians told us would be just as accurate. We figured everyone who read GAME NEWS was entitled to voice an opinion, not just a selected few. As a result, we're swamped with work, but it's worth it. It's great to know that many of you refer to the magazine as "our GAME NEWS," meaning you feel it's as much yours as anyone's. That's something I've noticed often in the time I've been here—I've had an awful lot of letters in the past eighteen years—and it has always made me feel good. Even when you're chewing me out or questioning Game Commission programs for some reason, there's almost always a personal tone about it, an underlying friendliness, as if the Game Commission and its people, including the GAME NEWS gang, and you are all part of some big family with a common goal. Even when we argue about the best way to reach that goal, we're all working toward it, and one way or another we're making progress. By now we all know that answers don't come quickly and absolute answers don't come at all, for different conditions require different responses. But constant work and study result in overall improvements.

Anyway, we are working on the questionnaires, and we'll get a detailed report in as soon as possible. In the meantime, we can give you the following idea of how things are shaping up, based on a very small percentage of the responses: The average subscriber has been getting GAME NEWS for almost 14 years; two-thirds of our readers are male, one-third female; each copy is read by  $2\frac{1}{2}$  persons; the most popular feature is Field Notes; 4 out of 5 respondents prefer the current 6 x 9 size to  $8\frac{1}{2}$  x 11; advertising is opposed almost 2-1 but the same ratio would like color; almost everyone hunts deer; the average Pennsylvania hunter travels over 1000 miles and hunts 30 days annually, has taken 10 deer in 26 seasons, and owns 8 guns. More later.—*Bob Bell*



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Donald R. Craul**, President  
Lewisburg & Wellsboro

**Thomas P. Greenlee**, Vice-President  
Tionesta

**Taylor A. Doebler, Jr.**, Secretary  
Jersey Shore

**Edwin J. Brooks**  
Lansdale

**Elmer M. Rinehart**  
Stroudsburg

**Paul E. Hickes, Jr.**  
Alexandria

**C. Dana Chalfant**  
Gibsonia

**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director

**Harvey A. Roberts**  
Deputy Executive Director

**Ross E. Starner**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration

**Dale E. Sheffer**  
Game Management

**Lantz A. Hoffman**  
Information & Education

**Jacob I. Sitlinger**  
Land Management

**Gerald D. Kirkpatrick**  
Law Enforcement

**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor

**Robert C. Mitchell**  
Assistant Editor

**GAME COMMISSION**  
(717) 787-4250

**FEATURES**

**Pennsylvania's Ice Age** ..... 3  
By Eugene R. Slatick

**Rabies—A Threat to Man and Wildlife** .. 7  
By Elizabeth Stewart Lytle

**Thoughts On Your First Gun Dog** .....13  
By John D. Taylor

**A Buck Well Earned** .....19  
By Richard Tate

**The Grass Grows Greener Under the  
Pheasant Crates** .....24  
By Jane Scott

**They Loved Pennsylvania** .....27  
By Charles M. Thomas, Jr.

**NEWS**

**Books in Brief** ..... 12, 44 & 54

**Field Notes** .....34

**Conservation News** .....39  
By Ted Godshall

**In the Wind** .....64  
By Bob Mitchell

**COLUMNS**

**Young Artists Page** .....47

**Outdoor Wildlife Learning** .....48  
By Bill Einsig

**DGP Diary** .....50  
By Joe Carlos

**Thornapples** .....52  
By Chuck Fergus

**A Career in Archery (Archery)** .....55  
By Keith C. Schuyler

**The Trade (Guns)** .....59  
By Don Lewis

**COVER PHOTOGRAPH BY JOE REYNOLDS**



# Pennsylvania's Ice Age

By Eugene R. Slatick

**ICE AGE PENNSYLVANIA.** Some 75,000 to 12,000 years ago, glaciers covered the areas shown on map. Dotted lines indicate the maximum advance of a glacier that entered the state more than 300,000 years ago.

**H**ERE AND THERE in northeastern and northwestern Pennsylvania you can find small hills and winding ridges that seem out of place. Made of loose sand, gravel and rock debris, they look as if they were just dumped on the solid native rock. In some areas you might also see boulders of granite and other "foreign" rocks—rocks from areas many miles away. In a few places you can even find long scratches and grooves carved into solid rock. What caused all of these?

Many years ago such features were thought to have been formed when the land was flooded. Icebergs supposedly drifted in the floodwaters, scraping the land and dropping their loads of sediments. Interestingly, today we still say they were made by ice, but not by icebergs. Instead, it was the ice of the continental glaciers that were here several times during a period of Earth history called the Pleistocene—the Ice Age—which began 2 to 3 million years ago and ended some 10,000 to 12,000 years ago.

For reasons still not clear, the climate at that time turned very cold and snow accumulated faster than it melted. As the snow became deeper, the lower layers were changed into ice. An ice mass grew into a continental

glacier in what is now the Hudson Bay area of Canada. The glacier spread across the land, scouring the surface, pushing rocks and soil in its path, and carrying rocks and other material along with it.

Thick sheets of glacial ice blanketed most of North America four different times. During the last two times, they advanced into what is now Pennsylvania. The first glaciation, called the Illinoian, moved into the state some 550,000 to 350,000 years ago. The second, the Wisconsin, occurred in relatively recent times, about 75,000 to 12,000 years ago. During that glacial period, the best known, a glacier covered more than 6,000 square miles in the northeastern part of Pennsylvania and about half that area in the northwestern part.

## Northeast/Northwest

In the northeast, the edge of the glacier ran diagonally southeastward across the state, from about present-day Galeton, down near Williamsport, Berwick, and Stroudsburg, and then continued into New Jersey. In the northwest, the glacier's border trended southwestward, from Warren, past Oil City, Slippery Rock, and Ellwood City before entering Ohio. The older glacier, the

Illinoian, blanketed approximately the same areas, although fingers of ice from the northeast reached down as far as Lewistown and Allentown. Curiously, a large part of the northcentral part of the state was never glaciated.

The glacier never stayed in one place all the while. Rather, it behaved like a slowly moving frozen tide, its advances and retreats being measured in thousands of years. At times, the glacier crept forward, advancing perhaps several hundred feet each year. At other times the climate became warmer, causing some of the ice to melt and the glacier to recede northward.

We can only imagine the glacial conditions of the Ice Age. A glacier thick enough to fill valleys and still override the highest terrain must have been several hundred feet thick at its edge and several thousand feet thick farther back. It was about two miles thick in parts of Canada. The weight of the glacier was so tremendous that it actually depressed the crust of the earth around the Great Lakes and in Canada. The Hudson Bay area is still recovering from the weight of the ice and is rising about an inch in four years. Bitterly cold winds must have blown off the glacier and swept across the tundra lands that bordered it.

**MASTODONS, large and elephant-like, were once common in the marshy, coniferous woods of Ice Age Pennsylvania. They sometimes reached a weight of 7 tons.**

Not surprisingly, the glacier blocked the rivers that flowed north. The pre-glacial Allegheny and Monongahela rivers once drained northward into a lowland now occupied by Lake Erie. Ice dammed the rivers, forming lakes that then overflowed to eventually create the rivers' present-day courses. The Susquehanna River, by contrast, was already flowing southward during the Ice Age. A countless volume of sediment-filled water—from melting glaciers as well as from ice-dammed streams in the Finger Lakes region of New York—rushed down the Susquehanna River and carved its valley deeper and wider. In places, terraces of ice-age sediments line the sides of the river's valley. Similar deposits have also been found along the Allegheny and Delaware rivers.

### Warming Trend

By about 12,000 years ago a warming trend was thawing the Ice Age climate. About 9,000 years ago the glacier had melted back into southern Canada. By about 6,000 years ago, it had shrunk even more, covering only a comparatively small area to the east of Hudson Bay.

The glacier has been gone for thousands of years, but it left some mementos. Accumulations of stony debris called "moraines" mark the border of the farthest glacial advance. There are also hummocky mounds of sand and gravel called "kames," which probably were deposited as deltas along the edge of the melting glacier. Winding across parts of the terrain are low narrow ridges of sand and gravel called "eskers," remnants of streams that flowed under the glacier. Here and there, blocks of ice of various sizes were once buried in the outwash plain of the glacier; today those places have become marshy areas and "kettle" lakes. Some valley floors are blanketed with thick deposits of sediments left by the melting glacier.

Several of Pennsylvania's Ice Age features have become landmarks and scenic attractions. They include Conneaut Lake, a kettle lake in Crawford





County; the “buried valley” of the Susquehanna River, near Wilkes-Barre; Pennsylvania’s “Grand Canyon,” formed when the glacier caused Pine Creek to reverse its flow and carve out a deep gorge in Tioga County; Ricketts Glen State Park, with its rugged glens that were shaped by glacial melt-waters, in Luzerne County; the showcase of glacial features in Moraine State Park, near Slippery Rock, Butler County; the many scenic lakes in the Poconos; the Archbald pothole, reportedly the world’s largest, near Scranton; and Lake Erie, which was formed in pre-glacial lowlands that were scoured deeper by the glaciers.

### Sea Level Lowered

But the Ice Age did much more than alter the landscape. Because so much water was held frozen in the glacier, sea level was lowered about 300 feet. Shallow areas once covered by the sea became exposed to form land bridges. One was the Bering Land Bridge, which connected North America with Eurasia for thousands of years. Among the many animals that migrated across it to North America were the elk, caribou, sheep, moose, bison, black bear, mammoth, and mastodon. Along with them came early man. The migration was two ways, however. The raccoon, horse, beaver, camel, and opossum were some of the animals that headed westward across the Bering Land Bridge.

Some 10,000 to 8,000 years ago, when the Ice Age was waning and the climate was becoming more hospitable,

the Paleo-Indians wandered into pre-historic Pennsylvania. They found a land that was recovering from the long seige of bitter cold. Spruce, fir, hemlock, and pines grew in regions once covered by tundra. Oaks and other broadleafed trees were extending their range northward.

The Paleo-Indians were primitive hunters. Armed only with flint-tipped spears, they sought such game as caribou, bison, woodland musk ox, deer and mastodon. Of all the animals that the Paleo-Indians hunted, the biggest was the elephant-like mastodon. An adult mastodon stood about 9 feet high at the shoulders, had tusks almost as long, and weighed about 7 tons. It lived in marshy, coniferous woodlands. Although the Paleo-Indians were a nomadic people who left little record of their presence, it is possible that they used some of the mastodon’s bones and tusks for implements and parts of its hide for clothing.

**THE MOOSE-ELK, now extinct, carried antlers quite different from those of today’s moose. This animal was probably extinct before the Paleo-Indians arrived.**



**Subscribe to**

## **GAME NEWS**

**For a Friend . . .**

The roster of other Pennsylvania Ice Age animals include the short-faced bear, moose-elk, a deer-like peccary, a giant ground sloth, a beaver the size of a black bear, jaguar, saber-tooth tiger, large tapirs, and wooly mammoths. Most of them probably were extinct before the Paleo-Indians arrived. Direct relatives of many of today's animals were also here—the wolf, lynx, puma, skunk, weasel, porcupine, fox, and white-tailed deer.

Is the Ice Age a thing of the past? Maybe not. Some scientists think that another glacial period could be trig-

gered if the average annual temperature drops by some 10 to 20 degrees F. But that, of course, is speculation. For now, however, the story of the Ice Age remains a fascinating chapter in Pennsylvania's very ancient history.

### **For Further Reading**

*Glacial Deposits of Pennsylvania*, Map 59, Pennsylvania Geological Survey, Harrisburg, Pa.

*Glacial and Quaternary Geology*, by Richard Foster Flint, John Wiley and Sons, Inc., N.Y. 1971.

*Pennsylvania and the Ice Age*, by Vincent C. Shepps, Educational Series No. 6, Pennsylvania Geological Survey, Harrisburg, Pa., 1962.

*The Pleistocene History of the Appalachian Mammal Fauna*, by John E. Guilday, in "The Distributional History of the Biota of the Southern Appalachians. Part III: Vertebrates." Research Division Monograph 4, Virginia Polytechnic Institute and State University, Blacksburg, Va. 1971.

## **GAME NEWS**

Enclosed find check or money order for \$ . . . . . for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW

☐ RENEWAL

(Check One)

ACCOUNT NUMBER

In U.S. ☐ 3 Years \$16.50

☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

GAME NEWS Binder (Holds Twelve Issues of the Magazine)

☐ \$3.50

Name . . . . .  
(print plainly)

Address . . . . .

City . . . . . State . . . . .  
(Zip Code)

NOTE: All remittances should be made payable to the

PENNSYLVANIA GAME COMMISSION

Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567

DO NOT SEND CASH

Please allow 60 days for first copy.

# RABIES

## *A Threat to Man and Wildlife*

**By Elizabeth Stewart Lytle**

**W**ITHIN A two-week span last spring, two Mercer County residents were bitten by wild animals, a raccoon in one case and, in the other, a bat which had taken refuge within the folds of a pair of slacks pinned to a basement clothesline. Just to the east, in Butler County, another person was bitten by a flying squirrel, and a few weeks later an 88-year-old Maryland woman in a town not far from the Pennsylvania border was attacked by a furious groundhog. She suffered bites to the face, scalp, an arm and one ankle before managing to fling the mad creature into a nearby pond. In each case, tests attributed the bizarre animal behavior to rabies, an ancient scourge on the rise again in North America, and a threat not only to wildlife but also to humans and domesticated animals.

Those cases were serious enough, but prompt medical treatment prevented development of the disease in the attacked persons. A far more tragic case occurred in Lycoming County, in September of 1984. A 12-year-old boy, Ernest C. Cochran, Jr., of Williamsport, somehow contracted rabies and died in Geisinger Medical Center, Danville, despite every effort that could be made to help him. It is not known how the youngster became infected. A rumor that he had taken a stray cat and raccoon home, and might have been bitten by one before they ran away, was later denied. On the chance that a rabid animal might be found in the area, Game Commission officers Jerry Zeidler, Dennis Dusza and Dan Marks conducted an intensive trapping program in the area for several weeks, but not one infected animal was taken. Nor, as of this writing, has there been

a verified report of a rabid animal anywhere in Lycoming County. Nevertheless, Ernest Cochran was infected somehow and did die, Pennsylvania's first known case of rabies in a human in more than thirty years.

The name rabies derives from the Latin term "to rage," and the virus is unique in its ability to affect all warm-blooded animals. This factor helps explain why rabies has evaded centuries of effort to eradicate it. While extremely dangerous, it is a slow-moving contagion, lodging in the brain of animals where it destroys tissue and attacks the entire central nervous system. Experts say the best protection is prevention. The only life-saving treatment after infection lies in vaccination before symptoms begin. Once the virus passes its incubation stage, death is inevitable. It is possible to be bitten by a rabid animal, particularly a bat, and not even realize the cause of the injury.

**14 - 160 - 300 +**

Raccoons, bats and skunks are being blamed for the sudden and drastic increase in confirmed rabies cases. Pennsylvania Department of Health statistics tell the alarming story. In 1981, we had just 14 confirmed cases of animal rabies, a figure which jumped to 160 in 1983 and by early fall of 1984 had passed 300.

"That's not counting animals that die alone in the woods that we never know about," added Dr. Bobby Jones, a veterinarian and acknowledged rabies expert in the state health department's epidemiology section, Harrisburg.

These figures are in stark contrast to the first two years of this decade when Pennsylvania earned a rabies-free rating







from the Center for Disease Control in Atlanta, whose experts in animal-transmitted diseases are dispatched across the nation to help treat cases of human rabies.

Initial trouble spots for Pennsylvania, according to Dr. Jack Payne, Penn State University wildlife extension specialist and animal science researcher, were traced to an area near the West Virginia-Virginia border.

Rabies in animals is generally transmitted by a bite. Raccoons and skunks can transmit rabies 18 to 20 days before they are sickened by the disease. The virus is concentrated in saliva glands, and affected animals, considered to be "somewhat deranged," according to Dr. Jones, tend to wander great distances from their usual terrain. This combination of factors spread the virus across Pennsylvania's border. By late 1984, cases of animal rabies had been confirmed in 37 of the state's 67 counties, the problem being most serious in Adams, Bedford, Cumberland, Franklin, Fulton and Huntingdon counties. Last July the Game Commission removed protection from skunks, raccoons and foxes in this region in an effort to curb the spread of the disease.

Rabies is not confined to the woodlands of rural areas, however. Officers of the metropolitan police force in Washington, D.C., have been ordered to kill raccoons on sight, a response to what one government spokesman characterized as the biggest rabies threat there in two decades. The densely populated Washington suburbs are also hosts to one of America's largest raccoon populations.

Rabies in humans is rare in the U.S., but worldwide about 20,000 people die of it annually. Almost all of these are in poor, undeveloped nations. It is a horrible death, and once symptoms appear there is almost no hope for recovery regardless of medical intervention. That is why doctors urge immunization or "rabies shots" for anyone bitten by a wild animal or unvaccinated pet. While a cure eludes researchers, medical science has improved upon the

treatment used for decades. For many years, standard treatment required a long series of injections beneath the skin of the abdomen with a vaccine cultured from duck eggs. Nearly everyone who had these suffered an allergic reaction to the vaccine, resulting in painful swelling and bruises. In 1982, a new vaccine known as Human Diploid Cell Vaccine (HDCV) was fully licensed. Grown on a human cell culture, it causes little more discomfort on injection than a tetanus shot and can be administered in only five doses. HDCV is expensive, but the alternative is gruesome to contemplate.

### Shroud of Mystery

A shroud of mystery surrounds rabies, even though the disease dates back to ancient times and might have been the cause of so-called demonic possessions. Outbreaks of rabies, carried primarily by wolves and foxes, regularly swept Europe like a plague. More than once the necessity of curbing a rabies outbreak prompted an order to destroy all domestic dogs. Shipping a dog from one country to another still requires a quarantine period, used to prevent transmission of rabies.

The first rabies case in the U.S. was recorded near Boston in 1768. By the end of the next century it was known as far west as California. The virus first appeared in South America late in the 19th century, carried by bats.

Dr. Jones puts the carnivores at the top of the danger list for Pennsylvanians, noting "bats have little contact with humans, unless by accident. Sometimes a dog or cat will catch a bat and be bitten about the mouth, and in turn pass the virus to a human. Our bats are insect- or fruit-eaters, with small teeth. They can't penetrate the hide of a large animal like a horse or cow."

While researchers haven't pinpointed the source of their exposure, three cows and a horse contracted rabies in Pennsylvania in 1983, while 35 bats, up from fewer than 20 in the previous year, were confirmed as rabies carriers.



***Dutch Country Bluebirds*, by Ned Smith, is the second feature in the Game Commission's series of fine art prints being offered through the Working Together for Wildlife program. The sale of this limited edition of 600 signed and numbered collector-quality prints will be used to support nongame research and management programs, including bald eagle, osprey and river otter reintroduction projects. Delivered prices for the 15 x 22½ prints are \$125, \$225.50 framed, payable to the Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, PA 17105-1567.**

Dr. Jones says the skunk is the most dangerous carrier, although outdoorsmen are not likely to encourage a confrontation with this animal. As the Maryland gardener can attest, instinctive fear of man is no deterrent to an animal whose brain is being ravaged by the insidious virus.

The common perception of a rabid animal foaming at the mouth and chasing people is typical of one of the two rabies manifestations. This type is known as "furious" rabies. The grandma-chasing groundhog is a clear example. This stage lasts only a few hours, if it occurs at all. More likely is the "dumb" reaction. Affected animals lapse into a semi-conscious state, bit-

ing without provocation if disturbed. As with the bat hiding in the laundry, an attack is motivated more by fear or self-defense than aggression. Most people treated with rabies vaccine tell a similar story: they were bending over to examine a sick animal when the seemingly docile creature attacked.

That was the case for Kevin Wessell, 30, a resident of suburban Boston who was exposed to rabies when bitten by his own dog while working in Nigeria. The doberman was believed to have been immunized, and after being bitten, Wessell sought medical attention. Along with treating the puncture wounds to his arm, he was given two injections one of which he believed to be rabies vaccine. Months later, after it was too late, it was learned that was not the case.

Wessell was bitten in October and the wound had healed before he flew home for the holidays. Strange symptoms sent him to a hospital in January. He'd spent a sleepless night with pain in both back and chest. Visibly agitated and with what nurses described as a wild look in his eyes, the man complained of a sensation akin to choking, accompanied by involuntary gasping, as if he'd been frightened. Perhaps most bizarre of all, the sight of water was enough to send him into spasms of gagging.

Wessell's symptoms were among the most unusual contained in the pages of medical books. Before his ordeal was over, he would exhibit symptoms of dementia, frothing at the mouth and hydrophobia, which, strangely, affects only humans with rabies. Tales of animals terrified by the sight of water are one of the more common myths associated with rabies. Some humans infected by a bat's bite are free of the throat spasms, but blindness, pneumonia and grand mal seizures are common as the virus takes over and shuts down body systems.

Louis Pasteur, French scientist most widely known for the bacteria-killing process which bears his name, also directed his talents in chemical research to animal-transmitted diseases. Pasteur succeeded in saving the life of a French



farm child mauled by a rabid dog, relying upon a vaccine derived from the spinal fluid of rabbits. Treatment began before the virus took hold in the child's brain. Aside from improving upon the duck culture vaccine, modern medical research has been able to improve but little upon a treatment used first in 1882. Nearly a century would pass before the first person would survive a bout with rabies. Again the victim was a farm boy, this time in Ohio. He spent weeks in a coma, breathing sustained by a mechanical device and injected repeatedly with anti-convulsant drugs. Doctors used a shunt to drain a dangerous accumulation of fluid away from the child's brain. Only two others have survived rabies since then.

### Extra Tragedy

An extra measure of tragedy surrounds the death in March 1983 of a five-year-old Michigan girl. Her symptoms began in early February, a vague pain in the right arm. Within weeks she grew increasingly irritable, could not eat, and said the arm was even weaker, despite treatment for a sprain. After she lapsed into a coma, her distraught parents recalled a night in late August when the girl's screams had brought them running to her bedroom. She said a bat had bitten her, but unable to locate one, the parents concluded it was all a bad dream. Her death from rabies was the first recorded in Michigan in thirty-five years.

It was an ordinary spring day when Ann Bish, a Grove City housewife, went to her basement laundry to get a pair of slacks from a clothesline. While doing so, she tossed the garment over her arm, only to experience a sharp pain in the crook of her elbow. She ran upstairs to examine her arm in full light, discovering a pair of close-set puncture wounds, oozing blood. Her discomfort eased after first-aid and the wounds were nearly healed about a week later when her husband discovered a bat in the basement, and lab tests proved it was rabid. If not for her husband's trip to the basement in search of some

fishing tackle, the woman might not have known until too late what had bitten her. This story also has an unusual aspect. Less than a year earlier the woman's husband had left a state health department job to teach at a nearby college. One of his duties had been to prepare animals suspected of having rabies for lab examination. The woman was treated with HDCV and told of her experience in the hope of averting another tragedy like the one in Michigan. "If your child says he's been bitten by an animal, please believe him," she advises.

Human rabies is rare, but the danger increases as the number of animal cases grows. In a news release put out by Penn State's department of public information in November 1984, Jack M. Payne noted that different strains of rabies generally attack different species of animals, and the current outbreak is centered upon the raccoon. Therefore he advises trappers and raccoon hunters to get the pre-exposure vaccine. He also advises that deer hunters in any outbreak area—primarily southcentral Pennsylvania last fall—should wear gloves, goggles and dust masks while gutting their deer. The same precau-

**INTELLIGENT and mischievous, the raccoon is equally at home in the wilds or in the suburbs—one reason they present a danger during a rabies outbreak. Despite their cuteness, don't get close to one!**

Christian Lytle



tions should be taken while removing antlers from a deer, he says, as this process generally exposes the animal's brain area — a center for the rabies infection.

The news release further notes that cooking meat at 150 degrees for one hour will kill the rabies virus, but freezing, on the other hand, preserves it. Live rabies virus has been found in Arctic foxes that have died in the fall, been frozen through the winter and thawed in the spring.

Although research is not conclusive, Dr. Payne says, rabies virus is generally thought to live in the saliva outside a rabid animal for no more than twenty-four hours.

For those who do opt for the vaccine series, Payne recommends the more expensive intermuscular injections. The interdermal (between skin layers) injections

are cheaper because less vaccine is delivered, but they provide less protection. He also urges pet owners to have their pets vaccinated to create a "barrier" between wildlife and humans. The majority of human infections are caused by pets that have been in contact with rabid wildlife. More cats than dogs have been found to be rabid.

Respecting wildlife — leaving it in the field and forest where it belongs — is another part of that barrier, Payne says. Children should be taught not to handle wildlife and to report any interaction with wildlife immediately.

In any encounter with an animal which results in a bite or a scratch, the wound should be thoroughly cleansed and flushed with soap and water as soon as possible, and a physician should be consulted immediately.

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Handloader's Digest**, ed. by Ken Warner, DBI Books, One Northfield Plaza, Northfield, Ill. 60093, 320 pp., large format, softbound, \$12.95. This is the tenth edition of the most comprehensive publication available to the millions of shooters who roll their own ammo. Besides the large catalog section of all items necessary and useful in the field, there are three dozen excellent articles by top gunwriters. Ed Matunas's "It Isn't Always Handloads. . . . But That's the Way to Bet" points out that the vast majority of blown-up guns are the result of incorrectly assembled handloads, and explains in detail how to avoid such mishaps. This piece alone is worth the book's cost. Jack Lott and Ken Howell have contributed excellent articles on wildcat cartridges for Africa, Dave Corbin gives technical dope on making big game bullets, and Ed Yard tells how he tests gunpowder for total available energy. There's a lot more good stuff too. The best HD yet.

**Popular Sporting Rifle Cartridges**, by Clay Harvey, DBI Books, One Northfield Plaza, Northfield, Ill. 60093, 320 pp., softbound, \$12.95. Harvey divides the available rifle cartridges into varmint/target, varmint/deer, deer/bear, and medium/heavy big game categories, then gives personal observations on each, handloading data, and other pertinent stuff. Includes many quotes from other gunwriters to buttress his viewpoint: they are interesting but perhaps unnecessary as he himself is an expert in the field — as he proves by recognizing the virtues of the excellent but largely forgotten 284 Winchester. Loads of photos too. A good job.

**Bolt Action Rifles**, revised ed., by Frank de Haas, DBI Books, One Northfield Plaza, Northfield, Ill. 60093, 448 pp., large format, softbound, \$13.95. An updating of de Haas's 1971 book, with many additional models covered. Excellent semi-technical information on bolt guns from the M1871 Mauser to current models. Many photos, detailed drawings, parts lists and specifications. Highly useful to any guncrank.





JACK, A YOUNG German shorthair, being styled-up by author. For pointing dog lovers, a dog locked up on a stylish point is the high point in a day's hunt.

# Thoughts On Your First Gun Dog

By John D. Taylor

**W**HAT IS IT that prompts reasonably sane fellows to jump head-first into the stormy but usually rewarding world of "De Shootin'est Gent'man and his fav'it buhd dawg at work an' play?" Is it something inborn, a trait of the breed so to speak, that requires a catalyst to bring it out?

It was one of those golden November mornings. The sun, only an hour old, cast an amber glow on weed patches and briars that choked the valley floor. Farmland bordering the valley, corn country, was the ideal place for gaudy ringneck roosters to feed. The valley was their hole-in-the-wall, a place to hide until the next feeding raid.

Ringneck roosters were the reason I

was standing on a hilltop overlooking the valley. I'd paused to savor the morning, alone and silent. Being alone was a disadvantage in pheasant cover, particularly in the practical, bird-finding sense. But a glorious morning unshared like that one was made being alone doubly painful.

Before I turned to leave, I noticed two hunters and a pair of strange looking dogs enter the valley from the cornfields. The dogs were bird dogs, but I couldn't tell what breed. Something in the way the hunters moved and the way their dogs worked said they knew what they were doing. I had a ringside seat so I decided to stay and watch.

The hunters kept moving up the val-



ley, toward me. Their salt-and-pepper bird dogs cast left and right, constantly crossing and re-crossing each other's trails. They seemed to be enjoying what they were doing.

Almost directly in front of me, one of the dogs skidded to a stop and assumed a strange posture. I'd never seen anything like it before. He was quivering with excitement. His brace mate coursed up to his right, about ten feet away, and did the same thing.

It finally hit me—they were pointing a pheasant. Wow! I'd just stomped through that section and hadn't put up a single bird.

The hunters carried their over-unders at port arms as they moved into the dogs' find.

For a moment I was with them, experiencing that rapid-fire excitement

that happens when you know a long-tailed rooster is about to erupt in front of you. My heart pounded. I began to tingle. In excited palms, my 20-gauge pump gun got slippery.

"Rooster!"

Up he came, screaming Chinese at heathen dogs and hunters. The blurry bird froze in midair, just before he turned to rocket out of the valley.

He was fantastic. A shaft of sunlight caught and reflected the vibrant colors of his painter's palate plumage. Amber, crimson, black, green, blue, gold, and white swirled together, creating a flying rainbow.

At the shot, he fell like the proverbial sack of potatoes. One of the dogs was called and commanded, "Hans, fetch." Hans fetched and delivered the bird to the hunter's hand.

I turned, ransacked by a range of emotions that went from utter joy to sadness, and walked away. "That was bird hunting," I mumbled. I vowed, someday, to repeat the scene.

### Come Close

Since that glorious November morning, I have managed, at least to my satisfaction, to come close to repeating the scene. There were lots of begged or borrowed hunts over friends' dogs, or dogs of friends of friends. Then, finally, my own salt-and-pepper bird dog, a German shorthair, became a reality. I've never regretted the decision to get into gun dogs. There were times, like when Illustrious ate my favorite hunting cap, that I've wondered. But he did redeem himself later. The "Hey, Boss, this what I'm supposed to do?" look when he fetched a grouse I'd all but given up on more than made up for past indiscretions.

Whatever your catalyst might be—visions of a stout-hearted Lab braving



**DAVE MILLER** cautions Casey with a "stay" before throwing a pigeon for her to retrieve. Note Casey's attentive, eager-to-cooperate expression.

frigid water and ice to fetch downed mallards, or a grouse covert afternoon shared with a good friend and a merry springer—you've had one or you wouldn't be reading this. Before your first headlong leap into Gundogdom can happen, some things must be considered.

If you want to do it right, lots of planning and serious thinking are necessary. It's not all that bad. Dreaming about gun dogs and finally choosing one is almost as much fun as hunting over one.

### Four Questions

Before you plunk down a wad of hard-earned greenbacks, carefully consider the following four questions. (It's a good idea to jot your answers down):

1. What are your wants and goals, as related to the type of hunting you do the most of, and which breed best suits those needs?

Before you even think about owning and hunting a gun dog, you should know yourself and what your main hunting interests are. To do this, you're going to have to be bluntly honest and deal in realities, not hope-to-be's. A common example is the fellow who really likes pheasant hunting, but when he keeps track of his actual hunting realizes that waterfowling uses more of his time. If he chooses a dog more oriented towards pheasants than waterfowl, he'll probably regret the decision.

2. What do you really want from a dog?

Sometimes this question can't be answered honestly until you've owned and worked with a few. Also, it's not fair to judge a breed by an individual dog's actions. That's why it pays to shop around and hunt over as many dogs as possible. Afterward, you should be able to list a number of traits you desire—

range, size, housing, trainability, the type of birds he's most adapted to hunting, etc.

3. What are your limitations in terms of training time, availability of training areas, patience, and the amount of money you can afford to fork out to train a dog?

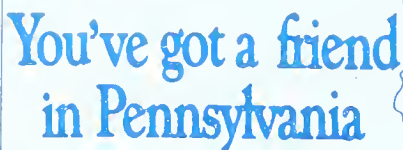
It's hard to recognize and accept limitations, but for the dog's sake, do so before you buy one. Everyone likes to think he's long on patience, but are you really? Some breeds require far more patience than others to train. If you deal in realities, not what you'd like things to be, you won't end up with a dog you hate to work with.

In terms of expense, some dogs, namely the pointing breeds, require more money to train. Birds aren't cheap these days, and lots of bird practice is exactly what you'll need to reach the top level of a pointing dog's capabilities. The amount of time, money, and effort you're willing to sink into a dog can and will affect how well the dog does his job. Feeding and training some dogs can cost very little when compared to the amount of time and money it takes to produce a real champion. Be honest with yourself, and face your limitations



**CASEY proudly returns to handler with a pigeon she had to hunt dead. Though usually harder to find than a live bird, a dead one gives dog a chance to show its ability.**





## You've got a friend in Pennsylvania

before you get into something you wish you hadn't.

4. The final question to ask has more to do with the future than it does with the here and now of gun dogs. What do you anticipate happening in the next decade to your hunting, training time, job, family, etc.?

That's a hard question to answer, but do consider it. Probably for the next ten years—and it could well be longer—Pup will be part of your life. If you choose a particular breed that suits your current needs, and then those needs change drastically (moving from PA's close-hunting grouse and woodcock country to the South's wide open quail havens, for instance), your choice of a breed may be self-limiting. That's not to say Pup couldn't be re-trained. However, it is a good case for a dog who can do a lot of things adequately, such as the Continental breeds, rather than one or two things in a very specialized way. At any rate, try to anticipate what the future will hold and incorporate it into the selection of your breed.

### Now It's Time

Once you've answered the four questions, you should have a thorough idea of what you're looking for in a gun dog. You've determined what you want, now it's time to see which dog might best suit those needs.

Everybody, it seems, has an opinion on what a certain breed can or cannot do and which breeds are best suited for different birds. Those opinions are usually based on various levels of experience with a number of individuals. There is, however, no proven way to determine if the Pup you select will do what it's supposed to. Some retrievers are rotten duck fetchers but great in

the uplands, just as some pointing dogs would make better duck fetchers.

In selecting a breed, take into account that the Pup you choose may not have what it takes. It's unusual, but it does happen.

When choosing the breed that's right for you, get your information from knowledgeable sources rather than Uncle Ralph and his beagles who "point" pheasants.

Gun dog columns, books on gun dogs in general and breeds in specific, and breeders who breed and hunt a variety of dogs are good sources to check. Learn all you can and synthesize the information into a general consensus. If your choice meets your needs, you've found your dog.

Choosing a breeder, next to picking a pup, is the riskiest thing a gun dogger can do. There are, unfortunately, enough unscrupulous breeders around to make it tough for those who really work at producing topnotch gun dogs.

In most cases, you can spot shoddy operations by looking and talking to the breeder. If the kennels appear run-down or the dogs look unhealthy, forget the place. The breeder who tries to hard-sell a dog is someone to avoid.

A good breeder is one who has a goal he's searching for within the breed(s) he works with. The goal may be better noses, stronger hearts, greater lung capacity, speed, closer range, or something else. The important part is that the breeder has a goal.

It takes a long time to achieve breeding goals with dogs, and a breeder who is in the business to achieve goals is far less likely to mess with inferior dogs. The breeder should be able to tell you why he chose to mate a particular sire and dam and give you a reasonable account of what's happened so far in his breeding program.

A good breeder has clean kennels, healthy dogs, and a good attitude toward his animals. Once you've seen the extremes, champion kennels to puppy factory, you'll be able to spot a good breeder. Leave the checkbook at home and do some window shopping.



In most cases, it's best to use the services of a local breeder. Picking a good breeder is easier if you can visit the kennels several times. Some gun dogs, however, are harder to find and may warrant long range investigating. If you can't find the dog you're after within the state, don't be afraid to try elsewhere. Just make sure the people you deal with are reliable and established. Ask for references.

Before committing yourself to a pup, get as much background on the sire and dam as possible. If you can, hunt over them or talk to someone who has.

The majority of Pup's traits come from the sire and dam. It's important you recognize any undesirable traits before buying one of their offspring. Pup may not display the trait, but the odds for it are great. Range, hard mouth, genetic diseases, and personality traits can come directly from Mom and Pop.

The grandparents are important too. If the breeder tells you how Pup's great-great-great grandmother won fourteen different field trail championships but fails to mention Pup's closer lineage do-

ing anything spectacular, look out. That Pup's distant kin won recognition is fine and dandy. However, it won't do you a bit of good if succeeding generations failed to carry the family tradition.

When the dam gives birth to a litter of puppies, it's a good idea to visit the kennels at least two times prior to choosing a pup. Most breeders don't want you around until the pups are at least five weeks old. But after five weeks, you should nose around. Observe the puppies together. How they interact with one another and the people they've seen, smelled, and tasted so far will tell a lot about how Pup will behave later on.

Various tests supposedly can determine which puppy will make the most promising prospect. Perhaps some things in tests might reveal an insight, but I have a tough time believing they're infallible. If you want to run tests, what the heck. Watching puppies respond is fun and having a bunch crawl all over you is even more enjoyable.

However, there's nothing wrong with picking the pup who picks you.

Maybe tests serve as justification for

**JACK HOLDS STAUNCHLY** over a planted pigeon he found as author moves in for the flush, gun ready.



# KILLING EAGLES IS UNLAWFUL!

Mature Bald Eagle



Immature Bald Eagle



Up To  
**\$4,000 REWARD**

for information  
leading to the CONVICTION of individuals who MOLEST,  
INJURE, or KILL BALD or GOLDEN EAGLES.

Report violations to your LOCAL GAME PROTECTOR.

REWARD PROVIDED BY

U. S. Fish and Wildlife Service • Pennsylvania Game Commission • Pennsylvania Chapters of the National Audubon Society •  
National Wildlife Federation • Pennsylvania Wildlife Federation • Pennsylvania Federation of Sportsmen's Clubs •  
Pennsylvania Forestry Association • Hawk Mountain Sanctuary Association

doing just that. Be observant and use commonsense to make your pick.

By observing the litter, you should gain an understanding how individual Pups function within their family group. Be careful though, it's easy to fault a puppy who may be tired and listless when he's had an off day.

A couple things to look for are intelligence, a bright cheery attitude, and contentedness. The pup should give off an aura that says "I'm happy to be a member of my breed," rather than slink away to a corner. Shy dogs can develop serious problems later on. Also, check for deformities, good posture, good teeth and gums, good coat, and healthy feet. Avoid, in most cases, the runt and the biggest of the litter, unless they pick you.

I like scrappers, the ones who get smothered by a pile of their sleeping brothers and sisters and have to prod, poke, and paw their way to the top. I'm not sure what it might say about a puppy, except that he might be tough and obstinate, but I like it anyway. The most important thing is to be satisfied with your selection.

After you've signed the check, take a

moment to thank the breeder and leave your name, address, and phone number. Most breeders, while they're glad to be rid of an extra mouth to feed, get a little mushy when they see Pup go. That's understandable. It took a lot of their time, effort, and care to make Pup a reality. Allow them a final indulgence. Also, a breeder, if you remain in contact, can answer some of the questions that are sure to pop up while raising Pup.

Keep Pup warm. An old blanket or towel is great on the ride home, and don't expect to sleep much that night. Pup is understandably scared of the big new world unfolding in front of him.

Pup should have time to adjust to his new home. Give him free reign the first few days. Keep an eye on him so he stays out of mischief. (You'd be surprised how much trouble they can find to get into.) Take plenty of time to play with and pay attention to him. Puppies need lots of play and attention to keep happy.

If you want to give him toys, Nylabones or Cressite toys won't harm his digestive system. Most of all, interact with Pup and make him feel wanted. There's nothing quite like the joy a puppy fang piercing your earlobe or a wet tongue slurping your face brings. He won't be a puppy for long, so take time to enjoy it while you can.

## Taken the Plunge

Now that you've taken the plunge and joined the ranks of sportsmen who find there is no such thing as hunting when it doesn't involve gun dogs, take a moment to thank the curious combination of luck, fate, supreme power, or whatever that made your entry into the world of De Shootin'est Gent'man possible. An awful long time ago, a wolf-like ancestor of Pup's helped an ape-like ancestor of ours to find a meal in a barren world. From that moment on, canines and humans shared a bond, something primitive and raw, but also uniquely satisfying. The bond between man and dog is something no other disparate creatures have ever been able to match.



# A Buck Well Earned

By Richard Tate

**I**N TODAY'S economy, earning a buck is often difficult for the average guy. Although hunting for whitetail bucks can occasionally be an easy (lucky) proposition, there are other times that the hunter, like the average worker, must work extremely hard to earn a buck. The 1982 season was such a time for me.

Some hunting seasons my desire to get a buck is overpowering, and I would brave Arctic temperatures to down one. Other years I am hopeful that I will collect a buck, but for some reason it seems to matter a little less. At such times I am a little choosier about the type of weather conditions in which I will hunt, preferring to rely on good weekend weather or an antlerless deer license, if I've been lucky enough to get one, rather than fight miserable elements on the opening day of buck season.

Last season I had a particular urge to shoot a buck, perhaps because I had not gotten one the previous year, and I vowed that inclement weather on the first day would not maroon me at home. Bad weather is an understatement of what occurred. An all day rain on Sunday saturated the forest and a drop in temperature froze things up. Then when I awoke at 4 on Monday morning, I found my home enshrouded in a pea-soup fog. Nevertheless, I ate a large breakfast and gathered my gear, despite having made the statement that I would never again hunt deer in fog and/or rain. On Sunday, my dad and brother, who usually hunt around home on the first day, had left for camp in Clinton County rather than deal with the wet woods at home. They felt that if it rained or they got fogged in at camp, they could at least enjoy the woodsmoke and the company of the other camp members.

By 5 o'clock I was stumbling along an old logging road toward my favorite deer crossing, and an hour later I was halfway up the mountain. But something was amiss; I had missed the old skid trail which I wanted to cross on my way to the top of the mountain, and though I was on the steep, rocky side which I always have to climb, I did not know my position relative to the deer crossing: was I to the right (south) or to the left (north) of where I wanted to be? I sat down to mull over the situation and decided I'd be able to tell where I was when I got to the mountaintop. There were plenty of familiar landmarks on top that I ought to be able to recognize, even in the fog.

## To My Delight

After a twenty-minute struggle over the slippery rocks, I arrived at the crest. And, to my delight, I had emerged from the fog which bathed the mountain. I immediately recognized a gnarled oak and I knew I wanted to go north a couple of hundred yards to find the crossing I was looking for.

Fifteen minutes later I was on watch. Under my well-worn hunting coat, I now wore a dry sweatshirt, a heavy woolen shirt, and an insulated underwear jacket which I had toted along in a knapsack and exchanged for my sweat-soaked T-shirt. Despite the constant dripping of water from the trees, I was quite comfortable sitting on my rubber cushion at the base of the old oak which appeared to be a survivor of the previous two years' gypsy moth onslaught. Many nearby oaks were dead: their bark had already fallen off, and in their weakened condition some had lost limbs when strong storms ripped across the mountain. This survivor overlooked a good deer crossing, a dip in the mountain through which







deer often traveled and which had accounted for several fine bucks in other years.

Not long after my arrival I heard the muffled crunch of a twig behind me, and I looked around only to see a deer disappearing over a small hump on the mountaintop. "Gee," I muttered, "can hardly hear them. I'm gonna have to be more alert."

There was almost no shooting from the sea of fog below me during the next hour; it was likely that whitetails were ghosting past hunters who could see less than 30 or 40 yards. I, meanwhile, commanded a clear view of the dip and hoped that moving hunters would send a deer my way. At about 8:15 I saw three deer trotting into the dip, and even without the aid of my scope I easily noted the antlers of the third one. I found the buck in my scope, but it appeared that he and his companions were not going to stop, and I prefer to shoot at deer when they are still. I remembered a trick that both my dad and my friend Darrel Claar had told me would sometimes stop moving deer, and I employed it. "Baa!" I called loud and clear. The three deer froze—the buck's head and shoulder right behind a tree, and I had to let the deer get going again. When they began to move, I again bleated. The buck halted broadside to me at 50 yards with my crosshairs on his shoulder. I eased off the safety, squeezed the trigger, and my 30-06 boomed.

That should have been the end of it. But if it were, the title of this article would not be "A Buck Well Earned." However, instead of dropping in his tracks or running 10 or 15 yards and falling over as several bucks I've shot had done, this deer careened off madly, on through the dip, and over the edge of the mountain opposite the side I had climbed earlier. Even so, I figured him to be lying only a short distance downhill, mortally wounded, for I'd had a perfect sight picture when I fired.

I was wrong. There was no buck lying there, though when I checked the spot where he had stood when I shot,

I found a splotch of bright red blood and a patch of deer hair. I practically crawled through the dip to find another spot of blood, this one not as large as the head of a thumb tack. I put my blaze orange hat beside it, and before I crept ahead to look for more blood, I collected my rubber cushion and knapsack, for there was no telling how far I might have to trail the deer. Twenty minutes and 50 yards later I found another drop of blood in the wet leaves as I slowly worked outward in small semi-circles from my hat. I marked this spot with a glove, retrieved my hat, and commenced the process anew. The next spot of red was about the same distance as the first, though scuffed leaves aided my slow search. As it turned out, the first several hundred yards of the spoor were about the same, and I became rather frustrated.

"How can this be?" I muttered. "How can he still be going? I sighted the gun in on Thursday, and it was dead on at 50 yards. My sight picture was perfect. I couldn't have made a bad shot. He's got to be here. Yet, he's hardly bleeding at all."

To make matters worse, it began to drizzle. The blood spots I was finding were becoming less concentrated as the rainwater began to wash the leaves, and I was really concerned that even if

**I WAS WRONG.** There was no buck lying there, though when I checked the spot where he had stood when I shot, I found a splotch of blood and a patch of hair.



the buck were dead I might not find him. That thought truly appalled me, for I don't like to even hear stories of wounded game escaping, let alone be responsible for it. "Come on, deer," I said, much as Santiago pleaded with the great marlin to die in Hemingway's *The Old Man and the Sea*. "Come on, you have to be here somewhere, and I want to find you."

Finally, near a small embankment, I found a place where the buck had skidded against a rock. A large splash of crimson covered it. For the next 200 yards there was a good trail, and it led me to the deer. After more than an hour of tracking, it was quite a relief to find the dead buck, a fine 7-point.

I saw that my shot had indeed hit my point of aim. When I field-dressed him, I discovered that the 150-grain bullet had destroyed the buck's lungs. Why hadn't he gone down immediately? Why hadn't there been a better blood trail? I have no idea how or why the buck ran so far with the mortal wound, but he did. The incident illustrates the necessity for following up every shot.

Only after I had found the buck did I realize I had another difficulty to surmount. I estimated I was around a third of a mile from the top of the mountain, and I'd have to drag the buck that way rather than downward. My old Scout was a couple miles away

on the other side of the mountain, and I did not know any of the landowners who lived at the bottom of the side I was on . . . or if they would appreciate me coming to one of their houses. In fact, I knew that some of the land below me in the dense fog was posted, and I did not want to antagonize anyone who had been forced to limit trespass on his property. So I opted to drag my buck back to the top of the mountain and then pull him from there to my vehicle.

After I completed field-dressing the buck, had tagged him, and had tied on my drag rope, I carried my hunting coat, knapsack filled with all of my shirts except my sweatshirt, and my rifle 50 yards uphill before I began to drag the deer. However, I wore my orange hat and vest as a safety precaution. I found it was usually easier to lift the buck by his antlers for the short skids I could manage on the steep slippery rocks than it was to tug it with my rope.

It took me fifteen minutes to reach my coat, rifle, and knapsack, and already I was huffing and puffing. The drizzle seemed to get heavier as I repeated the process of toting my gear 40 or 50 yards, then returning to the deer and lugging him to the gear. At the end of an hour of this, I was soaked with sweat and rain and needed brief rests between my short thrusts up the mountain. Once, trying to pull the buck over a log with the rope, it broke and I tumbled into a pile of wet brush. Luckily, I had an extra rope with me. By the end of the second hour I was finally within a hundred yards of the crest of the mountain. I sat down to gulp my second cup of hot liquid jello, but when I tried to stand up I gasped with pain—my left thigh had a charley horse. Only after considerable



**I FOUND** it was usually easier to lift the buck by his antlers for the short skids I could manage on the steep slippery rocks than it was to tug it with my rope. Still, I spent 4½ hours pulling him home.



stretching and much kneading did the pain subside, but each time I lifted the buck for a short uphill pull, the leg throbbed angrily.

When I later related my story to a couple of guys, one said, "I would have left the darned deer out there. No buck is worth all of that."

Believe me, there were times during the long haul that I was tempted, but I managed to keep tugging the buck over the wet leaves. It was noon before I reached the mountaintop; prior to setting forth from there, I sat down to eat a sandwich and apple and to finish my thermos of hot jello. It is usually an hour and a half to the vehicle from there, unless there is a snow and relatively easy pulling, but I was two more hours getting to my Scout. Though the pulling downhill and across a level flat was much easier than the exhausting drag up the steep mountainside, I still could go only forty to seventy-five yards at a time between stops to catch my wind. Before I reached a spring where I settled down for a half-dozen cups of water and another sandwich, my other thigh cramped up. It took five minutes to get it ready so I could again begin to skid the buck.

After I filled my thermos with cold spring water, I resumed my drag. When I reached a small hill on the logging road I was now following, two hunters who had spotted me came up to look at the buck.

"Need a hand up the hill?" one asked.

I just nodded. They easily pulled the deer, which was probably 125 or 130 pounds when I shot it but which now had grown to at least 500 pounds in my mind, the hundred yards to the top of the hill.

"Think you can get it from here?" they smiled.

"Yes, thanks a lot!" I said gratefully, though with rather poor manners for I neglected to even ask my benefactors their names.

The last half-mile was mostly level or downhill, but I stopped regularly and

twice drank from my thermos. Though the final 50-yard stretch was uphill, I could see my Scout and I managed to get the deer to the vehicle without incident. It was 2 o'clock when I loaded the deer into the back of the Scout and sat down to finish my water. It had been over 5½ hours since I shot at the buck, a shot that really should have put him down in his tracks. I had spent 4½ of those hours pulling him home.

### Worth It?

"Was he worth it?" a friend asked me several days later. Had I been asked that at 2:30 of the day I shot the buck, I wouldn't have been certain. There are a lot of places to hunt where chances to get a buck with much less effort are possible. But those places, in my opinion, are either less safe or are someone else's "stomping ground." I feel safe on the top of the mountain, and I do not feel I am infringing on territory that I know someone else hunts. But, was that buck really worth all that effort?

Certainly he was. Making a kill is an integral and exciting part of deer hunting, and it is the obligation of a successful hunter to get his deer home. I could never knowingly leave any animal, especially a fine buck, to rot in the woods as several persons intimated they would have done. I would be willing to pull and tug for a couple of days to get a buck home if I had to. And to tell the truth, I think those other hunters would, too.

Actually, I am rather pleased with myself for having been able to follow an almost nonexistent blood trail for several hundred yards before I found the deer. I am thankful that my physical condition allowed me to work as hard as I did, even overcoming leg cramps to get the buck home. Although this was not the largest buck I have ever killed, I appreciate him more than most of the others. I think that the concentrated tracking effort and exhausting physical effort permit me to claim that I really earned this dandy buck.

# The Grass Grows Greener Under the Pheasant Crates

By Jane Scott

HERE IT IS, spring again, and another winter and deer hunting season are behind us. Our house is not your typical home, where, as the first day of buck season approaches, the men and children get their gear in order and dream of the large deer they hope to bag in the opening hour. No, ours is quite different. It's usually mass confusion. Phones ring off the wall, people constantly knock at the door, and I barely get a glimpse of my husband for days at a time. Erma Bombeck, eat your heart out. If you think your book *The Grass Grows Greener Over the Septic Tank* is funny, you ought to be married to a game protector and live in a housing development. You'd really get material.

We're the only family on the street that has real deer as lawn ornaments. Dead ones, of course. As you drive through this small housing project you see beautiful homes, with manicured lawns. Then all of a sudden it looks like the stomping grounds of the Great White Hunter. As the roadkills, illegals, and spoiled deer filter in, the mountain grows bigger. In three days it seems about two stories high. It's all just part of my family's lifestyle, though secretly I'm waiting for the department of health to condemn us.

After a week of plea bargaining my husband promised to remove them the next day. As Murphy's Law always prevails here, we had an ice and snow storm that evening, and our mountain of deer turned into an instant ski slope, sled ramp, and snowmobile course.

Those one-time cute creatures of the woods became solid chops. From time to time as winter goes on we'll have a sunny day, allowing some of the neighbor kids to bring their picks and free one of the top deer. When they lean the frozen deer against the fence, it will substitute for the pony they always wanted.

I remember Christmas, too. Everyone else displayed a beautiful wreath or a wooden Santa on their lawns, but at our house wooden stakes were driven in the lawn and four frozen deer were propped up with lights dangling from antler to antler. Neighbors and passersby commented on how real the reindeer looked, but when stray dogs started nibbling on the legs it was a dead giveaway.

By now the neighbors on each side of us are worried about diminishing property values, so I am insisting upon at least the removal of our Christmas display.

Dead deer are not the only added attraction at our place. We also have an assortment of traps ranging in size from

---

Jane Scott is the wife of District Game Protector Al Scott, of Rural Valley, Armstrong County. Her experiences are typical of those of most game protectors' wives, and this story shows the good humor and adaptability with which they support their husbands. In the end, it's this support which makes much of the outstanding work of the Game Commission's field officers possible. We in Harrisburg appreciate it, and hope Pennsylvania's sportsmen do too.





**WE'RE THE ONLY** family on the street that has real deer as lawn ornaments. Dead ones, of course. It looks like the stomping grounds of the Great White Hunter.

bear to muskrat on a garage wall. Then there are the different styles of furs which are often draped over our fence. When one neighbor commented on my unusual laundry, I tried to claim we were opening a local branch of the Hudson Bay Trading Post, but I'm not sure she took me seriously.

When hunting and trapping seasons are in full swing, you can't move through the yard without walking into some kind of furry creature. The garage hangs full of stretched and dried pelts, and we no longer have room for the car.

As the spring thaw approaches, a rank odor filters through the air and the house walls. I try to decide if it's the deer jaws or the salted deer pelts in the garage, and eventually conclude it's neither; actually, the ski slope has finally thawed to the point where we can call in the deputies and shovel the remains on their trucks to be hauled away.

For almost a week it's like heaven. I have the lawn to myself, all signs of death are removed, and the green blades of grass are reborn before my very eyes.

I knew it was too good to be true. They start to arrive. With spring comes the opening of our neighborhood zoo. Naturally, we have the largest variety of animals, so our lawn attracts the largest crowds. They come from far and wide to gaze at animals ranging in size from baby rabbits and fawn deer to an occasional bear.

### Quarantined?

One visitor asked if I was having marital problems or was quarantined for some rare disease. I replied no, and asked what gave her that idea. She pointed out the back window at the barbwire fence surrounding our yard. I patiently explained that we run this small amusement park every year from early spring to the end of summer.

When summer ended and I finally gave up on having green grass and a flower garden, I began to think about the next three months before deer season comes again. At least there wouldn't be any animals—alive, dead, dried, stretched, or otherwise littering our home and yard.

Things went quite well for a few

**Subscribe to**

## **GAME NEWS**

**For a Friend . . .**

weeks. Not one wild animal track was seen in the front yard mud, only those of the neighbors' dogs or cats, and an occasional souvenir of their visits. I could live with this small inconvenience, but one morning as I opened the shade to welcome in the morning sun, a cloud of doom passed above me. It couldn't be — but they were here. As the game farm trucks pulled in front of the house, tears fell from my eyes.

Soon white and green boxes of turkeys and pheasants were spread all over the lawn and driveway. People started to arrive. There was cheering, and a few arguments started about how many boxes of birds they could have and where they were to be stocked. These people — deputies — come from all walks

of life. They are school teachers, mailmen, miners, utility company employees, doctors, lawyers, and on top of it all, our minister. As the cheering and good-natured feuding went on, it took all I could do to keep from grabbing the minister and asking him to give a prayer for my sanity. When he noticed the look on my face, he gently patted my shoulder and comforted me by pointing out that we never needed to cut, fertilize, or water the grass.

As the first snows of winter fell on the pheasant crates stacked eight deep on the front lawn, I thought about the balance of nature, and the humor we must recognize in this style of life.

As one year passes into another, I pray for the game farm trucks to make a wrong turn and end up in China, snow and ice storms to drift southward to Florida, or at least an eleven-month vacation in Hawaii, with only green grass, blue skies, white sand and ocean surrounding me. But I'm sure none of those things will come to pass. So let me dedicate this to all the other wives of Game Commission employees — who were never promised a rose garden!

## **GAME NEWS Collectors, Please Note**

We receive numerous requests for back copies of GAME NEWS. We are usually able to handle these if they are for issues published in recent years, though we must charge \$1.00 per copy for finding them in the warehouse and postage. However, not all back issues are available, and this can be frustrating to persons trying to fill out their collections.

This situation has bothered GAME NEWS collector Melvin Lees for years. He took the usual course of haunting flea markets, gun shows, etc., with limited success. The basic problem, as he saw it, was his inability to reach others with similar interests. It followed that the solution would be a clearing house for serious collectors. Therefore, he has offered to serve in this capacity. Anyone with back issues of GAME NEWS to trade or sell should send him a list; include your name, address and phone number. Collectors desiring back issues should send a list of the copies wanted, *along with a large size self addressed stamped envelope*. Mr. Lees says there will be no charge for his services other than the stamped envelope needed to refer you to a source, if known, to take care of your wants. His address is: Melvin Lees, 211 Prospect Ave., Charleroi, Pa. 15022. Phone 412-483-2954.



# They Loved Pennsylvania

by Charles M. Thomas, Jr.

*They were hunters. In an earlier time they would have dressed in home-tanned buckskin and lived somewhere far back in the sheltered lee of the mountains in Pennsylvania's Black Forest. In their lives they worked with their hands on wood and in rich soil. They honored the wildlife and the wild places. May their kind never die.*

I DON'T KNOW when I began to realize that Pennsylvania was unique. The idea was something I never thought about twenty-five years ago. Oh, I was born in Pennsylvania, Lock Haven, to be exact, but did not live in the state permanently until I was in high school. The point I'm trying to make is that before one realizes he is privileged to be offered something of value, he must be made aware of the value. Older people are always the best advisors.

My father was a career army officer, so from the time I was small until high school days, our family lived in various parts of the world and the United States. Our visits to the Keystone State were as frequent as possible under the circumstances, and as I grew older my longing to live in this state went from a subconscious desire to a near obsession.

The problem was solved when my father retired to his old stomping grounds near Jersey Shore. I was a sophomore in high school and so eager to dive into the outdoor life I had been experiencing vicariously for five or six years that I didn't know what to do first.

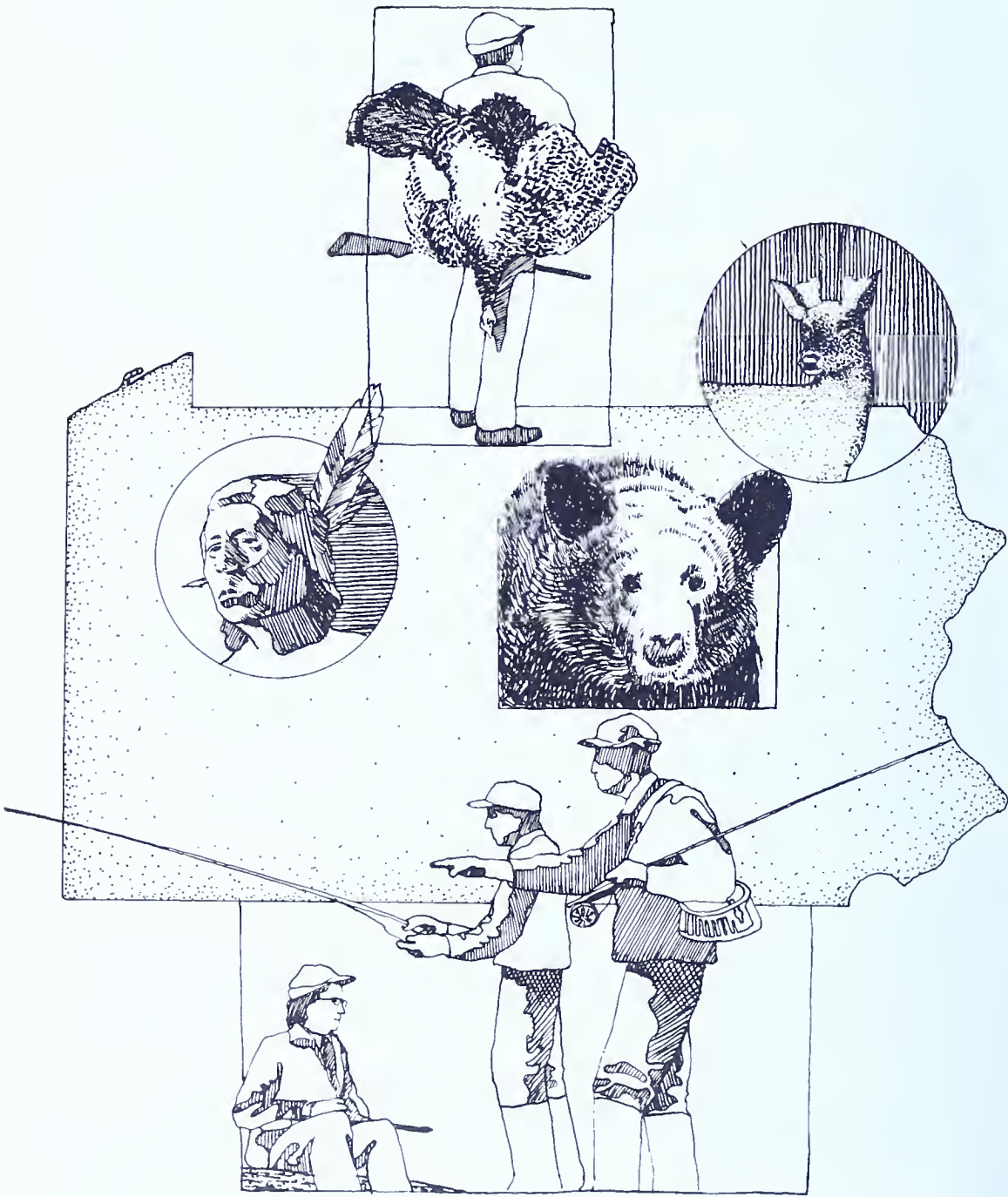
Nearly all of my relatives enjoyed the sportsman's bounty that Pennsylvania had to offer, but the ones I looked up to most of all, the ones who knew everything there was to know about hunting, fishing, trapping, nightcrawler catching, and countless other highly worthwhile activities, were my Nan and Pap. They were my maternal grandparents and the objects of much of my adolescent attention and respect during my formative years. Even today I some-

times feel a twinge of guilt when I realize the amount of time my younger brother Bill and I gave them compared to our brief visits to other loving relatives. We were young and the attraction they held for us never really dimmed.

I guess it was Nan, my grandmother, Thelma Berry, who taught me the most about how lucky we were to live in Pennsylvania. In fact, when my wife and I made the difficult decision to try life in a move to Alaska nearly ten years ago, Nan was genuinely puzzled as to why anyone would move out of Pennsylvania.

When we came home on leave during my father's army years, a trip to my grandparents' cabin along Pine Creek near Slate Run was one of our first activities. The small, low-roofed structure was decorated with numerous pictures and busts of Indians. Nan had collected





these likenesses of Pennsylvania's earliest residents, and sometimes told us of the early tribes that had traveled the rivers and streams that we fished and swam in. It never occurred to us to ask how she knew those things; Nan knew everything.

Prior to those yearly two-week trips to Clinton County I would regale my

army-brat friends with accounts of the deer hunts and trout fishing expeditions I was going to enjoy when we made the longed-for move to "God's Country," as Nan so aptly and proudly described northcentral Pennsylvania. I was the only kid I knew of whose grandmother owned and used a Model 94 Winchester.



Nan was a realist, not an uncommon trait in her generation. She and Pap ran a fair-size greenhouse for years past the age when many others were just trying to rock their chairs against the grain on the porch floor. I have yet to see a place where plants jumped out of the ground as they did from that Susquehanna dirt. Nan never lied, and if any of us kids tried to stretch the truth a little we were awarded with a look that would cut steel. Nan was gentle when circumstances called for it and tough when she had to be. Her grandsons were all the better for her guidance.

She's been gone a long time now, but I can still see her cutting the best homemade noodles in the world on her dining room table while straightening out Walter Cronkite on our clan's first TV set. When she passed away in 1978 I was on a caribou hunt. My mother said Nan would have liked that.

Pap was a genuine character. Called "Buzz" by his cronies, Russel Berry was always busy. Of course, some people didn't think that making totem poles, gourd birdhouses, deer calls (yes, deer calls!), plaster animal faces, fish-eye pearls, and numerous other unusual items were the types of activities a man over social security age should spend his time on; I thought he was great. I guess he knew how lucky he was to live the life he did, because I can't remember ever hearing him seriously complain.

A self-employed carpenter, he had already retired by the time I reached high school. Often while driving up Route 44 along Pine Creek, he would point to a deer camp nestled in the pines and tell us when he built it or when the porch was added. He also had a habit of pointing out the spots where he had taken a deer or turkey or even a bear. I mention this because of the additional habit he had of drifting over the center-line while gesticulating with his filter-less Camel to a place on the far mountainside where the 4-point had rolled after he shot. My cousin Bob Sweely and I would be pressing the floorboards for all we were worth and shifting our weight in a vain effort to will his '50

Chevy pickup over to the safe side of the road. We didn't want to hurt his feelings, and at 30 miles an hour he never had a close call while we were there to mentally guide his eyes back to the business at hand. Those drives, probably done slowly on purpose, were magic. To this day I can point out where he once saw a large black bear have trouble climbing a fence.

### Importance of Wildlife

Nan and Pap were always quick to impress upon us the importance of wildlife, and they seemed to know more about the habits of nature's creatures than the average hunter. We were leaving Little Pine Creek Dam one summer evening when Pap slammed on the brakes and crunched the pickup into reverse. Bob and I were thrown forward in the enclosed back of the truck (we had trusted the steering on this trip to a higher force) and, while extricating ourselves from the pile of fishing rods, bait buckets, and other paraphernalia, wondered what merited such treatment of the hardware. Several deer, one of them an 8-point buck, had drawn Pap's attention. After watching them for a few minutes, the engine ticking at idle, we moved on.

That my grandparents were proud of Pennsylvania, I've already mentioned. The showing of this pride took many forms. Nan once mentioned the proximity of black bears to their home. Ever the doubter, I was surprised to cut fresh bear tracks not a quarter-mile from the house one fall. I don't remember expressing any doubts about her wildlife knowledge for quite some time. Then early in the fall of 1973, I noticed some long slits in the screendoor on their cabin porch. Pap's quick gruff answer was, "I've told you about the bears around the cabin." Sure, I thought, but the porch steps?

Later that year, while a friend and I were turkey hunting from there, I was awakened in the middle of the night by the sound of the porch door slamming. In a sleepy haze I attributed the swinging of the spring-loaded door to the

wind. After the third slam, when I was debating whether or not to get up and hook the door, I noticed the coals in the fireplace were glowing calmly, unlike their usual behavior when a stiff breeze helps the chimney air flow.

Earlier slits in the screen forgotten, I padded to the cabin door, an old-fashioned one that is mostly single-pane glass, and turned on the porch light. If you have never stared face-to-face with a large black bear through a glass door, let me tell you, it is unnerving. Before I could decide what to do next, she calmly kicked the door open with a hind foot, snagged another black walnut from the bag Pap had left on the porch, and vanished in the night. That the bear and two cubs showed up later that morning while my partner Pete Colville was on his way to the outhouse is not the point of this anecdote. Pap's subdued reaction when we told him of the incident said "I told you so!" in ten-foot letters. He was more surprised when he found we had doubted the cause of the screen damage in the first place. It is not hard to realize now that an 80-year-old man who had roamed the woods for over 60 of those years had a lot to offer that couldn't be found in books. He shot a turkey that fall. I don't know who was more surprised, the turkey or Pap, but when his 870 came up, the last turkey he was to shoot came to bag.

### Rare Compassion

Once, when I was in high school, I was trout fishing from the cabin while Nan enjoyed whatever it is that the woods offer to each of us, and Pap was fishing when not puttering around the property. I have never been much of a fly fisherman and that day was no exception. My hand-tied flies didn't have much chance to attract fish because of my usual casting problems. Pap walked up as I made one of my patented "anchor chain" casts. Loudly I bemoaned the fact that, because of my department store line, I was unable to produce the delicate approach that fooled wily brown trout. Genuinely concerned

about my troubles, Pap asked to try my rod. After stripping out enough line to almost cross Pine Creek, he allowed the fly to alight gently, the line floating down to lie serenely on the surface tension of the water. "Nope, that's not it," he said seriously. The rare show of compassion to his oldest smart-aleck grandson did not go unnoticed. I'm not saying he wasn't sympathetic to my troubles; he usually preferred to get to the root of the problem faster than he did that day over 20 years ago.

My grandparents sold fishworms for years. Their garage cellar was full of old refrigerators and boxes of Pap's famous worm dirt. There really wasn't any soil in it; basically traditionally minded, Pap and Nan weren't afraid to try new things. However, after many years of offering their bait in a self-service fashion, it clearly hurt them to realize that some people would take a dollar bag of worms and not pay for it. They worried about Pennsylvania and the folks who frequented its streams and hollows.

Pap died three years ago at the age of 90. Those last few deer seasons he couldn't really hunt, but something made him wipe the old lever-action and make the trip to the woods. Things were hazier than in times past, but the smells and the sounds were undoubtedly the same as in pre-Great Depression days when the senses and the legs were young.

Speaking of the old days always prompted Nan and Pap to stress that, in the case of hunting, modern hunters are much more fortunate than were Pennsylvanians in *their* younger days. They told us that proper game management took the post World War I deer herd from a low point to where it is today. "In those days it was a rare thing to kill a deer," they would say.

They were special people. Honest, hard-working, compassionate. And they were ours for what seems now to be a short time. A few years ago I came across an article in the *GAME NEWS TREASURY* that hangs in my mind relentlessly. It's called "Far Off Hills,"



and was written by Bob Bell in 1960. I didn't see it when it was first published and wouldn't have understood it then anyway. It's about a couple who left Pennsylvania, looking for the outdoorsman's nirvana. From north to south and east to west they searched. They eventually found what they sought in their starting place. Those hills *are* in Pennsylvania and I see them clearly now. They have an intangible pull that's hard to explain. I once thought they could be silenced by the northernmost spine of the Rockies, but they weren't even muted. I am in Alaska now, but in my mind's eye I see a hollow in northcentral Pennsylvania. It is thick with hardwoods, with a little laurel here and there. The chilly winter sun lights a figure sitting on a large rotting log. The 32 Special lies easily across the Woolrich-covered knees above the red boots. Gray hair shows around the edges of the Jones hat. It is Nan. She is smiling.

Father down the hollow I see Pap. He is bending the ear of a young deer hunter. If he is encountering any opposition to his feelings on gun safety, he'll be sure to mention the bullet hole in his truck fender. We never found out how it got there, but we all knew what it meant. Someone had been careless,



and that wouldn't be tolerated. Later, he will work his way back up the hollow to round up the gang.

As long as I live, their love of Pennsylvania will be with me. It was obvious Nan and Pap loved everything about the outdoors in the Keystone State, and now I realize that, unbeknownst to me at the time, they transferred that feeling to their grandsons. It is a duty and a tradition we are honored to carry on.

*As I sit here in my house in Fairbanks, I feel acutely the great distance between me and those Pennsylvania hollows. There is nothing like Pennsylvania whitetail hunting, Nan and Pap used to tell me. They were right about that and much more. May their kind never die.*

## New Outdoor Recreation Maps

Did you ever have an urge to stomp through some new grouse coverts, explore an isolated mountain ravine, or take the family on an outing to see the fall foliage, but didn't know where to go? Now, to help you decide, the Game Commission is offering six new maps designed specifically for outdoorsmen. Each multicolor 24x36-inch "Outdoor Recreation Map" covers one of the Game Commission Regions (formerly known as field divisions). Featured are Game Lands, State Forests and Parks, and private lands included in the Commission's Safety Zone, Farm Game and Forest Game programs. Also depicted are municipalities, roads, waterways, and—giving the maps a three-dimensional appearance—100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from: the Pennsylvania Game Commission; Dept. AR, P.O. 1567, Harrisburg, PA 17105-1567. Individual State Game Lands maps are still available for 50¢ each, and can be ordered by number from the above address.



**REVEREND ROY GULLIFORD**, Executive Director of the Bear Creek Lutheran Camp, greets students on their arrival.



**THANKS TO THE** cooperation from the Luzerne County Bowmen, every student received expert hands-on archery instruction.

**WITH A** student-to-instructor ratio of 7 to 1, each student received individualized instruction on safe gun handling practices.



**NO AMOUNT OF** classroom instruction can equal the benefits of just a short amount of time on the range. Here students get to fire a few rounds and then check to see how well they did.



# HUNTER EDUCATION

**T**HIS PAST JUNE the Game Commission's Hunter Education camp to provide young hunters with the knowledge and skills to receive more than just the legally mandated instruction. Under the direction of Ed Sherlinski, Supervisor of the Northeast Region, Game Commission staff and other volunteers held two 3½-day sessions at Bear Creek Camp in Luzerne County to supplement the Game Commission's extensive training and hands-on experience. The camp received many businesses, organizations, and individuals donated money, equipment and services for the camp. This pilot project was held again at Bear Creek Camp, and another session will be held at the Solar Center in Milford. Anyone interested in this coming June should write the Northeast Region Office, P.O. Box 220, Dallas, PA 18612, Attn: E. F. Sherlinski, or call 717-675-1143. Each session is limited to 100 students, and places will be reserved on a first-come, first-served basis.

**FIRING AT** clay birds provided the students with extremely valuable training that probably paid big dividends in the field during the hunting seasons.



# ATION— CONO STYLE

mission conducted a hunter  
ring hunters with an opportunity to  
d hunter education training. Under  
f Information and Education in the  
s, hunter education instructors and  
t the Lutheran Church of America's  
primary purpose of the camp was  
hunter education course with more  
with hunting equipment. Because  
als too numerous to list here donated  
e, each student had to pay only \$30  
essful that two sessions will be held  
n will be held at the Natural Science  
attending a hunter education camp



ON AN obstacle course  
simulating hunting condi-  
tions, above, students  
participated in an exercise  
in which they learned the  
safe ways to maneuver  
past fences, fallen logs,  
and other obstacles. Be-  
low, students are taught  
the basics of shooting  
and handling a muzzle-  
loader.



AFTER 3½ days of intensive training, students  
were tested on the information presented at the  
camp, above. Those who passed received hunter  
education certificates and patches, fluorescent  
orange hats and hunting license holders, below.







# FIELD NOTES



## Good Signs

**ADAMS COUNTY**—I received less complaints this past buck season about a lack of deer than any of the other twelve seasons I've been here. Some had not seen deer, but stated they had seen a lot of signs and knew the deer were in the area. Several had seen more deer this year than for the past several seasons. A few hunters even wondered if we had trucked deer in with cattle trucks because they were seeing so many animals. This sure proves that the Game Commission's deer management system is working better than ever. —DGP Gary W. Becker, Aspers.



## Everybody Wins

**McKEAN COUNTY**—This month when the ice is melting and you head for the swamps and creeks to trap beavers, take some time to ask the landowners if they need a few beavers removed. By trapping beavers from areas where people have problems with them, you can better the image of trappers, help the landowners, and make a few bucks. —DGP John Dzemyan, Smethport.

## The Most Ardent Stay

**BRADFORD COUNTY**—The temperature here on the second day of bear season was low enough to drive even ardent bear hunters out of the woods. Deputy Carl Young and I checked an 83-year-old hunter who was sitting on watch on Armenia Mountain. But what made this really unusual was that driving for this man was an 82-year-old woman. His name was Lawrence Dunbar, Elmira, New York, and the driver's name was Alice Weller, Franklindale. They told us they were lifelong friends and both had lost their spouses. Mrs. Weller said her husband had bought the rifle she was using in 1918, and Mr. Dunbar bought his in 1911. Deputy Young and I didn't seem to mind the cold nearly as much after visiting with these two wonderful hunters. —DGP William A. Bower, Troy.

## Shoulda Gone

**DAUPHIN COUNTY**—There appeared to be a 60 percent decline in hunters on the past opening day of general small game, compared to the previous year. Most of those hunters who were out, however, reported having a good day. Not only were weather conditions the best in the last several years, but game populations were also better than average. —DGP Skip Litwin, Hummelstown.

## Back to Normal

**FULTON COUNTY**—Concerns about rabid deer here vanished with the opening of the antlered deer season. We figured it would. —DGP Mark A. Crowder, McConnellsburg.



## Ask John

When neighbor Eddie Laskoski brought home his 5-point buck, his little granddaughter asked how he caught it. After Eddie replied that he had shot it, her next question was, "If you shot it, why is there a price tag on his ear?" —SIE John Badger, Ligonier.

## Now About That Room

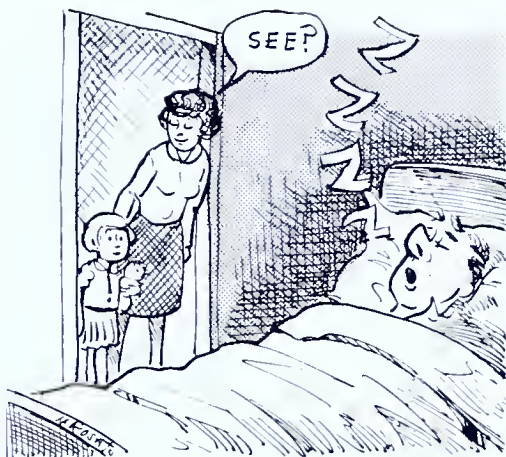
**UNION COUNTY**—A while back my daughter was sitting motionless among bedroom clutter when her mother asked why she didn't get busy and clean up the mess. Sheri's reply was that she couldn't just then—she was practicing not moving for when she went deer hunting. Incidentally, the practice paid off. She got her deer on opening day. —DGP Bernie Schmader, Millmont.

## "Bark's" Worse Than Bite

**BUTLER COUNTY**—One evening I received a call from a 911 operator about a wild animal that had chased some people into their car and was under it growling. The 911 operator had already dispatched the North Washington fire and rescue squad, and was requesting our assistance. No sooner had I called a deputy than I received a return call from 911 saying the emergency was canceled. The wild animal had turned out to be their housecat. —DGP Ned Weston, W. Sunbury.

## Five Bright Spots

**SOMERSET COUNTY**—Among the headaches and hassles of the past deer season was one bright spot. Five individuals faced up to their responsibilities and turned in antlerless deer they had mistakenly killed. This is more than the total number of such kills brought to me in the three previous hunting seasons I've been here. Gentlemen, you've restored my faith in our hunting fraternity. —DGP John G. Smith, Salisbury.



## Satisfied

**FAYETTE COUNTY**—On the evening of the second day of buck season, I stopped in at home for about half an hour to check on phone calls and get a bite to eat. While there, my five-year-old daughter, Sheila, pulled my wife aside and asked, "Does Dad ever sleep?" Two days later I slept late *just* to satisfy her curiosity. —DGP Don Smith, Uniontown.

## Safe and Sound

**CAMERON COUNTY**—Each year we hear about some slob stealing a deer from a youngster, so the beginning to this story came as no surprise. A father had sent his son back to camp to get warm. Along the way the boy shot his first deer. As the youngster was tagging his trophy, a stranger walked up and asked if he could help. The boy replied that he didn't have a knife or rope and asked the man to please watch his deer while he got his dad to help. By now you are probably anticipating the usual end to the story, as I did when I heard it. But when the youngster returned with his dad, the deer was still there and the older hunter was standing guard on a ridge overlooking the area. The two waved to each other and the hunter moved out of sight over the ridge. That young hunter asked me to pass along his thanks, and I'll add my own for helping affirm my faith in Pennsylvania sportsmen. —DGP Joe Carlos, Driftwood.

## Be Advised

**VENANGO COUNTY**—It never ceases to amaze me how some landowners post their property, hunt on their neighbors' land, and then call us to arrest someone trespassing on their property. They are almost always quite indignant when they find out we cannot arrest them as it's the landowner's responsibility to do the prosecuting. Perhaps these people need to be reminded of the fact that Pennsylvania's hunters do not want their license monies spent to keep land closed to hunting. —DGP Len Hribar, Oil City.



## Our Kind of Kid

**CLARION COUNTY**—According to a local teacher, when an intelligent 8-year-old boy was being tested for acceptance into his school's Gifted and Talented Program and was asked to name the four seasons of the year, he replied, "Fishing, hunting, and deer. That's all I can think of right now." —DGP Gordon Couillard, Clarion.

## Lotsa Biggies

**NORTHAMPTON COUNTY**—I had trouble finding small game hunters this past season, but the deer hunting pressure was heavy and the harvest was good. Most bucks taken were 6-, 7-, or 8-pointers, and I received few complaints from landowners. —DGP Richard W. Anderson, Nazareth.

## Big One

**GREENE COUNTY**—Picking up roadkilled deer gets to be quite routine during the fall months, so I was especially surprised when I went for a roadkill this past October and it turned out to be a 51-pound male beaver. He probably had finished cutting down all the trees along the Monongahela River and was moving his timber operation to the Allegheny. —DGP Robert P. Shaffer, Carmichaels.

## Seeing Orange in Moscow

**SULLIVAN COUNTY**—The editor of our local newspaper, Dr. Tom Shoemaker, recently made a trip to Russia. Visitors to that country apparently are allowed to bring in with them only small tokens. As such, Doc took a variety of Game Commission SPORT materials to pass out to the Russian people. I am now wondering if my supervisor is going to allow me to investigate any reported violations I receive from over there. —DGP Barry Hambley, LaPorte.

## No Maybes

**McKEAN COUNTY**—I received many comments about the deer herd this past hunting season. Most hunters saw a good number of deer and were satisfied, but a few grumbled about there not being any. Maybe if they would get out of their vehicles and into the woods, they would see more deer, but some just can't get off the road. —DGP Jim Rankin, Port Allegany.

## Checkoff

**CLEARFIELD COUNTY**—With state income tax time here, now's your chance to do your part for Pennsylvania's wildlife. You can elect to have a portion of your tax return go to benefit the fish, wildlife and endangered plant communities that all of us so enjoy. So, when it comes tax time, *do something wild*. —DGP Jim Neely, Penfield.





## ASAP

**WAYNE COUNTY**—This past November was not one of Land Manager Wilmer Peoples' better months. Even after a disastrous fishing trip where his car engine blew up and he caught a salmon that already had the fillets removed from it, his troubles did not stop when he returned home. A sow bear wandered into his garage and carried off his winter supply of hickory nuts, and then had the nerve to return, open the family freezer and steal the frozen chickens he was saving for a barbecue. Now, everyone wants to know when Wilmer will hold his next barbecue.—DGP Donald R. Schauer, Honesdale.

## Nothing to Hide

**CLEARFIELD COUNTY**—After my son Roger shot his buck on the second day of the season, he accompanied his friend, Scott Love of Houtzdale. As they were driving to a hunting area the next day, they were waved down by an approaching motorist. He told them, "Make sure your guns are unloaded, game wardens are checking vehicles up ahead." Roger advised the man that if he had his rifle with him, it wouldn't be loaded, and that his father was the game warden. The man smiled sheepishly and pulled away—probably thinking, "That's what being a good samaritan gets ya."—DGP Jack Furlong, Ramey.

## Big Dividends

**BEDFORD COUNTY**—During the past deer season, I became amazed at the number of bluebirds I saw while patrolling. These beautiful birds are getting to be quite abundant here and are a welcome sight on a cold winter day. The success behind the return of these birds can be attributed to the outstanding work done by Land Manager Steve Schweitzer and his Food and Cover crew. Their efforts in building nesting boxes and placing them throughout the county on public as well as private land is certainly paying off.—DGP David R. Koppenhaver, Everett.

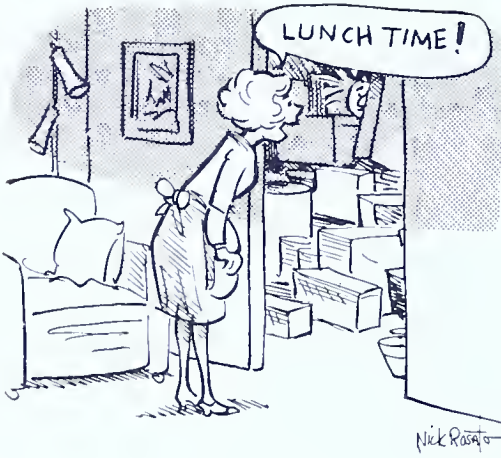
## No Way, No Way

**ERIE COUNTY**—On the opening day of buck season I received a phone call that was a little late, and another that was a little early. One person asked where he could take a hunter education course—and the other asked if the deer season was going to be extended.—DGP Andy Martin, Erie.



## Call a Robin

**MONTGOMERY COUNTY**—Deputy Thomas Scarpello recently received a call from an irate woman who demanded something be done about all of the worms that appeared on her driveway after a rain.—DGP William Wasserman, Montgomeryville.



### Where's Harold?

**ELK COUNTY**—My wife Carole and I have decided that my office in our home, which has served its purpose for a number of years, is gradually getting smaller. As I sit here typing I see: a library of books; slide projector and trays; movie projector and films; camera and lenses; boxes of new forms; boxes of hunting license applications; batteries; shells; flares; gun cleaning equipment; boot and shoe brushes, polish and spray; confiscated firearms; bows and arrows; spotlights and traps; two-way radios and antennas; maps; boxes of hunter-ed material; trapper training material; signs; uniform equipment; bear tranquilizing equipment; bear and small animal trapping equipment; gun cases; briefcases; desk; filing cabinets; phone recorder, and on and on. It's only a 12 x 14 room. — DGP Harold Harshbarger, Kersey.

### Helping Hands

Again this past year the ecology class of Pocono High School, instructed by Clancy Dennis, and the biology class of East Stroudsburg College, instructed by Dr. Larry Rymon, assisted at the Tobyhanna bear check station. I would like to thank them for a job well done. It would have been an impossible task to process the 108 bears and get the necessary data without their help. — LM Jacob Serfass, Gouldsboro.

### Unusual Tastes

**WESTMORELAND COUNTY**—I was stacking wood in the yard and noticed that my bird feeder was almost empty. I filled it and continued to stack wood. After a lunch break, I was returning to the wood when I noticed the feeder was almost empty again. I couldn't figure where all the food had gone, as a filling usually lasts several days. I refilled the feeder and went back to the wood, but kept one eye on the feeder. I didn't have to wait long to catch the culprit. There was my dog, Princess, on her hind legs, eating the seed out of the feeder. I know when I got my Weimaraner that she was a bird dog, but this is going one step too far. — DGP B. K. Moore, Saltsburg.

### He'll Learn

**DAUPHIN COUNTY**—I was skunked in spring gobbler season; never saw a turkey in the fall; couldn't find a deer with antlers, and have forgotten the sound of flushing grouse. So why does my 2-year-old son Travis keep calling me "da game detector?" — DGP Scott R. Bills, Millersburg.

### Truly Concerned

When I arrived at the S. B. Elliott State Park bear check station to begin operations on the first morning of bear season, I was met by a hunter (I regret I do not know his identity) who, early that morning, found a bobcat that had been accidentally caught in a raccoon trap. This hunter remained at the check station for nearly an hour, waiting so he could direct DGP Don Zimmerman to the scene. After inspecting the animal for possible injuries, Don released the bobcat unharmed—I'm still not sure of Don's condition after the incident. I salute you, Mr. Sportsman, for taking what must surely have been an extremely valuable period of your hunting time to ensure the safe release of one of our most prized animals. — LMO Jerry Becker, DuBois.



# Huge Illegal Wildlife Market Broken

A 28-MONTH investigation that started in Pennsylvania and ultimately spread to eleven other states climaxed on January 16 when state and federal agents began serving arrest warrants or filing criminal citations against 135 persons involved in illegal commercialization of fish and wildlife.

The investigation, one of the most extensive ever conducted in Pennsylvania and the northeastern states, involves more than 275 deer, over 10,000 pounds of striped bass and other game fish, and hundreds of ducks, geese, small game species, furbearing mammals, protected raptors, and songbirds.

In a joint statement issued by Game Commission Executive Director Peter S. Duncan, Fish Commission Executive Director Ralph W. Abele, and Howard N. Larsen, Northeast Regional Director of the U.S. Fish and Wildlife Service, it was revealed that during the past 28 months investigators uncovered substantial violations of state and federal fish and wildlife laws, not only in Pennsylvania, but also in Colorado, Connecticut, Delaware, the District of Columbia, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina and Virginia.

According to Duncan, "State and federal agents, posing as dealers in illegal wildlife, successfully infiltrated



**A CACHE** of illegally taken fish and game is examined by Peter S. Duncan and Ralph W. Abele, kneeling, Executive Directors of the Game and Fish Commissions, as Perry Heath and Gerald Kirkpatrick watch.

several known black market operations, and during the past two years documented hundreds of incidents where deer, bear, fish and other game and non-game animals were bought and sold."

In Pennsylvania alone, more than 275 deer and 1800 pounds of deer meat were purchased during the course of the investigation. According to state investigators, sixty-two persons will be cited in connection with illegal trafficking in deer and venison. Venison from Pennsylvania also was illegally sold in Connecticut and Massachusetts. In Maine,







**STATE AND FEDERAL OFFICIALS** sort through some of the tons of wildlife illegally killed for black market purposes. From left, Edward Manhart, Fish Commission law enforcement chief; Peter S. Duncan; PGC Law Enforcement Director Gerald Kirkpatrick; U.S.F.&W.S. Agent Leo Badger; Ralph W. Abele; and Perry Heath, PFC Assistant Law Enforcement Chief.

an investigation is continuing where two bears were illegally taken and sold in Pennsylvania.

Game Commission Law Enforcement Director Gerald Kirkpatrick and the U.S. Fish and Wildlife Senior Resident Agent for Pennsylvania, Leo Badger, noted that early in 1982 intelligence sources revealed increasing black market activity involving several species of wildlife—and indications that animals taken illegally also were being sold in interstate commerce, a violation of the U.S. Lacey Act. The Lacey Act prohibits transportation, sale, acquisition or purchase in interstate or foreign commerce of any fish or wildlife taken, possessed, transported, or sold in violation of state or federal laws.

“We knew it would be necessary to get inside their operations,” stated Badger. “Once this was done, it became increasingly evident the illegal commercial market was even more widespread than intelligence reports first in-

dicated. A majority of the animals sold to our agents were taken illegally—taken at night, during closed seasons and without licenses.”

Kirkpatrick said, “This confirms the fact that numerous game law violations occur whenever there is a black market demand for deer and other wildlife. Even in Pennsylvania, where we have a large and healthy deer herd, the resource cannot be effectively managed when the unlawful kill becomes a significant part of the annual harvest.”

#### Narcotics, Explosives . . .

Commenting on the scope of the investigations, Agent Badger added, “Some of those who sold us wildlife also offered to sell our agents narcotics, illegal firearms, explosives and other contraband. We have been cooperating with appropriate agencies on those matters, and several individuals face prosecution.”

During the course of the investiga-



tion, hundreds of violations were uncovered involving eagles, hawks, waterfowl, wild turkeys, pheasants, deer, bears, muskrats, bobcats, otters, fisher, rabbits, raccoons, and game fish, including trout, salmon and striped bass.

Regional Director Larsen and Fish Commission Director Abele concurred, "The decline of the striped bass is of major environmental concern. Its numbers have been dropping for more than a decade. We believe illegal harvests of large breeder fish and sub legal stocks that can make up future year classes have been contributing factors in the decline of this important species."

"Not only did we make contacts with fishermen supplying illegal stripers from waters in Maryland and Virginia," added Badger, "but we also found that established seafood dealers were buying and selling illegal fish. During our investigation, almost 7000 pounds of illegal striped bass were purchased illegally by major fish markets in Philadelphia, New York City, Maryland, Virginia, and the District of Columbia, or sold to our agents." Some fifty persons have been arrested or served warrants in those areas.

"In a separate investigation in North Carolina," said Larsen, "state and federal agents have arrested seventeen other persons charged with illegal interstate commerce in 4500 pounds of striped bass. All seventeen face potential fines of up to \$20,000 and five years in jail for violations of the Lacey Act."

In Pennsylvania and Delaware, investigators discovered an ongoing illegal market in birds for food, mounting, and plumage. Wildlife agents purchased over 500 Canada and snow geese, and numerous other protected birds including wood ducks, mallards, oldsquaws, gadwalls, several species of hawks, woodpeckers, ospreys, great blue herons, owls, and songbirds. All are protected by the Migratory Bird Treaty Act, which carries a \$2,000 fine and two years in jail for each violation.

Parts from two bald and two golden eagles also were bought and sold in violation of the Eagle Protection Act.

**This publication  
is available  
in microform  
from University  
Microfilms  
International.**

Call toll-free 800-521-3044. In Michigan,  
Alaska and Hawaii call collect 313-761-4700. Or  
mail inquiry to: University Microfilms International,  
300 North Zeeb Road, Ann Arbor, MI 48106.



Violations of the Eagle Protection Act can bring penalties of \$10,000 and two years in jail. Except for the Migratory Bird Treaty Act, the federal wildlife laws provide the possibility of forfeiture of vehicles and equipment used in violations.

Commenting on disposition of wildlife purchased during the investigation, officials of all three agencies noted that much of the evidence was promptly frozen and later distributed to public institutions and charitable organizations.

### **Real Threat**

Duncan said, "Wildlife black markets for illegal fish and wildlife present a real and current threat to a resource that cannot withstand large scale profiteering without regard for laws and the principles of resource management. It is next to impossible to uncover wildlife black markets using conventional law enforcement methods. That is why the joint decision was made to use undercover operatives in this investigation. In the future, if our intelligence sources conclude that undercover investigations are essential for the continued welfare of the wildlife resources we protect, we'll again deploy the special investigative task force. These procedures will be used as the need dictates."

State officials said these arrests should sound a warning to others intending to engage in such criminal activity: Wildlife management agencies cannot, and will not, tolerate wanton disregard for the welfare of wildlife resources they are commissioned to protect.

# Doing Something Wild



**PFC Executive Director Ralph Abele, left, receives gavel of Wild Resource Conservation Board from Rep. George C. Hasey, after being named 1985 board chairman.**

**P**ENNSYLVANIA'S Wild Resources Conservation Board recently allocated \$282,600 to fund sixteen projects designed to protect and conserve the commonwealth's nongame animals and wild plants. This money represents the 1984 contributions collected from 1983 tax refunds donated to the Wild Resource Conservation Fund.

The approved projects include:

- \$45,375 to fund DER's Wild Plant Management Program. The Department is establishing a classification system designed to help protect special plant populations. A centralized computer data base containing information on all of Pennsylvania's plants and wildlife will be maintained by the Department. This is statutory mandated under the Act 170-82.

- \$20,000 in mini-grants for wild plant habitat propagation projects.

- \$1,961 for Inventory of Wild Plants on Presque Isle. This will update 1908 survey.

- \$12,000—Updating the Pennsylvania Fish & Wildlife database. The first species to be updated are those which are listed as either endangered or threatened.

- \$29,500—Update 1950 publication, *Pennsylvania Reptiles & Amphibians*. This publication will be used as an educational tool which will be used in the classroom.

- \$9,136—Assessment and management of wildlife depredation at fish hatcheries.

- \$8,000—Extraction of useful data from organized snake hunts; rattlesnake populations and how individual snakes respond to the hunt and handling.

- \$22,862—A study of the drainages in the Ohio River system (located in Pennsylvania) where twenty-one of the twenty-nine undetermined status species are found in this watershed.

- \$35,000—Pennsylvania Breeding Bird Atlas Survey; the data gathered will provide a sound foundation for environmental planning at all levels of government. This study locates the breeding habitats of birds across the commonwealth.

- \$40,000—Western Pennsylvania Conservancy to continue its database and field survey work on Pennsylvania Natural Diversity Inventory.

- \$35,000—Nongame wildlife coordinator. This individual will be responsible for all activities dealing with nongame wildlife programs.

- \$9,000—This survey will help monitor thirty-two species for use in updating the computerized inventory system for mammal research and management.

- \$45,000—The Nature Conservancy to continue its database and field survey work on Pennsylvania Natural Diversity Inventory.

- \$10,000—Pennsylvania River Otter reintroduction program.



- \$3,200—A study to investigate the legal status of small nongame mammals in all fifty states and Canada. It will be reviewing all pending laws and regulations that govern mammal protection in these countries.

- \$2,000—Field survey of Pennsylvania Natural Diversity Inventory in the Pymatuning Region.

The Wild Resource Conservation Fund was established in 1982 by the State Legislature. This fund is to help finance nongame wildlife and wild

plant programs carried out by the Pennsylvania Fish Commission, Pennsylvania Game Commission and Department of Environmental Resources.

Pennsylvania State Income Tax Return provides a space where taxpayers may donate to the fund all or a portion of their tax refund. Those who wish to contribute, but get no tax refund, may write a check payable to the Wild Resource Conservation Fund and mail it to: Comptroller's Office, Box 2063, Harrisburg, PA 17120.

## 1985 Middle Creek Wildlife Lectures

Another series of wildlife lectures has been set up for the Middle Creek Wildlife Management Area Visitors Center. These will be 60- to 90-minute programs with appropriate visual aids, followed by question-and-answer periods. Admittance is free. Each lecture is scheduled to begin at 7:30 p.m. on the following dates, with the subjects and speakers as listed below:

April 3, 4—*Turkey Hunting and Ethics*, Harry Boyer, Boyer Turkey Calls; April 17, 18—*Journey Through the Seasons*, Joe McDonald, Nature Photographer; May 1, 2—*Acid Rain*, Fred Johnson, Water Resources Coordinator, Pa. Fish Commission; May 15, 16—*Pennsylvania's Deer Management Program*, Ted Godshall, Bureau of Information & Education, Pa. Game Commission; June 5, 6—*Pennsylvania's*

*Birds of Prey*, Mike Ondik, Safety Director, Pa. Forestry Assn.; June 19, 20—*Pennsylvania's Bald Eagle Recovery Program*, Jack Byerly, Bureau of Land Management, Pa. Game Commission; July 10, 11—*Black Powder Firearms Safety and History*, Harold Dellinger; July 17, 18—*Wild Foraging*, Kermit Henning, Educator & Outdoor Writer; Aug. 7, 8—*Pennsylvania's Black Bear*, Gary Alt, Wildlife Biologist, Pa. Game Commission; Aug. 21, 22—*Bird Feeding Facts and Fallacies*, Dr. Aelred Geis, Urban Wildlife Specialist, U.S. Fish & Wildlife Ser.; Sept. 4, 5—*Waterfowl and Habitat*, Charles Stroupfar, Manager of Middle Creek Wildlife Management Area, Pa. Game Commission; Sept. 18, 19—*Elk in the Keystone State*, Jerry Hassinger, Wildlife Biologist, Pa. Game Commission.

## Northwestern Pennsylvania Forest Landowners Conference

A special conference for woodland owners in northwestern Pennsylvania will be held at the Meadville Holiday Inn on March 30, 9 a.m. to 4 p.m. Forestry and wildlife specialists will speak on a wide variety of subjects, including basic forestry practices, how to improve woodlands for wildlife, selling timber, proper logging techniques, and forestry assistance programs. All interested persons are welcome. Pre-registration is required. The \$14 registration fee (\$12 each for additional family members) covers the morning coffee break, buffet lunch and a Woodland Owners Information Packet. Contact the Pennsylvania Forestry Assoc., 410 E. Main St., Mechanicsburg, Pa. 17055 (717-766-5371).

# Books in Brief . . .

(Order from publisher, not from Game Commission)

**Knives '85**, DBI Books, One Northfield Plaza, Northfield, Ill. 60093, 256 pp., softbound, \$10.95. This is the fifth edition of what has become an annual survey of one of editor Ken Warner's prime interests (he likes guns, too). Countless photos will fascinate anyone who turns these pages (knives inevitably affect people that way), while at the same time graphically illustrating the state of the art in all phases of the cutting edge. There are good articles, too, including Reginald Bretnor's "Mystique of the Fighting Knife," and Ashley Halsey, Jr.'s "Mystery of the Quaker Bread Knife." A directory tells where to find anything you want in the field.

**Shoot Better**, by Charles W. Matthews, Bill Matthews, Inc., P.O. Box 26727, Lakewood, CO 80226, 558 pp., softbound, \$17.95 delivered. Essentially a book of ballistic tables showing how 459 loadings of 105 commercial cartridges perform at ranges to 500 yards. Covers cartridges produced by Federal, Frontier, Remington, Weatherby, Winchester, Dynamit Nobel and Norma. Data have been worked out by the author, an engineer, starting with the muzzle velocity of each load, the ballistic coefficient of each bullet, and use of the Ingalls Tables. His objective was to tell those countless shooters who use commercial ammo how to hit their targets. The results are close to dead center.

**Wild Game Cookery, the Hunter's Home Companion**, by Carol Vance Wary, Countryman Press, P.O. Box 175, Woodstock Vt. 05091, 180 pp., softbound, \$8.95. Mrs. Wary, who lives in Coopersburg, Pa., spent countless hours as a girl in her mother's kitchen and her father's butcher shop, effortlessly picking up useful cooking hints and food secrets. Then after twenty years of her own experimentation with many kinds of game, she produced this book. As well as recipes for main courses, it gives down home ideas on appetizers and family dinners, and includes suggestions on how Italian, German and Chinese foods can be prepared with wild game. Autographed copies available from the author at 708 Wild Cherry Lane, Coopersburg, Pa. 18036.



LEE SNYDER, Walnutport, took this fine 175-lb. 10-point on the first morning of the 1984 season. Unofficially, it scored 141-2 by the Boone & Crockett method.



JIM ECKLES, of Coraopolis, took this big 8-point in Allegheny County during the past season, using a smoothbore with rifled slugs. Live weight was 217 lbs.



# Seedling Sales For Wildlife

**T**HE Game Commission is again offering seedling packets for sale to persons interested in providing food and cover for wildlife. The \$2 packet contains fifteen seedlings, three each of flowering dogwood, Asiatic crabapple, Maackii honeysuckle, scotch pine and white spruce. These trees and shrubs, grown at the Commission's Howard Nursery, will attract wildlife and also enhance your property. Past experience has shown these packets to be extremely popular, as demand always exceeds our supply; so plan to buy your packets at your earliest convenience. Locations, dates and starting times of seedling sales known at press time are:

*Clarion Co.* Clarion Mall, April 20, 1 p.m.; *Crawford Co.* Pymatuning Wildlife Museum, May 4-11, 10 a.m.-6 p.m.; *Venango Co.* Cranberry Mall, April 20, 12 noon-4 p.m.; Game Commission Northwest Region Office, April 24-27, 1 p.m.-3 p.m.; *Erie Co.* Millcreek Mall, April 27, 10 a.m.-9 p.m.; April 28, 12 noon-5 p.m.;

*Allegheny Co.* North Park swimming pool, April 20, 10 a.m.; *Greene Co.* advance sales only, contact county conservation district office; *Washington Co.* Washington Mall, April 20, 10 a.m.; *Westmoreland Co.* Game Commission Southwest Region Office, April 20, 10 a.m.;

*Clearfield Co.* Kohlhepps Hardware Store in Dubois, April 20, 10 a.m.-12 noon; *Lycoming Co.* Game Commission North-central Region Office, April 20, 9 a.m.-12 noon; *Potter Co.* Galeton Plaza, April 20, 9 a.m.-2 p.m.;

*Adams Co.* Gettysburg square, April 26, 12 noon-4 p.m.; April 27, 9 a.m.-4 p.m.; *Cumberland Co.* M&J Carlisle Mall, April 20, 10 a.m.; *Franklin Co.* Chambersburg Mall in Scotland, April 20, 10 a.m.; Greencastle Environmental Center, April 16, 7 p.m.-9 p.m.; *Huntingdon Co.* Game Commission Southcentral Region Office, April 26, 10 a.m.-4 p.m.; April 27, 8 a.m.-12 noon;

*Bradford Co.* Canton Square, North Towanda Shopping Plaza, Armenia Trading Post in Troy, and Wyalusing Fire Hall, May 3 & 4, 10 a.m.; *Carbon Co.* Lehigh Mall, April 26 & 27, 10 a.m.; *Lackawanna Co.* Viewmont Mall in Scranton, April 26 & 27, 10 a.m.; *Luzerne Co.* Laurel Mall in



**SIE Ed Sherlinski explains to prospective buyers the benefits they will derive from buying and planting the Game Commission's seedling packets. Hunters easily understand how wildlife is helped by such plantings.**

Hazleton, April 26 & 27, 10 a.m.; Wyoming Valley Mall in Wilkes-Barre, April 26 & 27, 10 a.m.; Bell Bend Environmental Education Center, April 28, 2 p.m.; *Monroe Co.* Stroud Mall in Stroudsburg, April 26 & 27, 10 a.m.; *Montour Co.* Montour Preserve, May 5, 2 p.m.;

*Susquehanna Co.* Hallstead, May 3 & 4, 10 a.m.; *Wyoming Co.* Route 6 Mall in Tunkhannock, May 3 & 4, 10 a.m.

Check local newspapers for sale locations not listed here, and for further information contact the nearest Game Commission Region Office.

## Tenacious Traces

On the gravel flats between the dunes in the Namib Desert, tracks of animals and people can linger for years. In one place, 30-year-old traces of the vehicle of a diamond prospector still show plainly.

# Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Doult, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

## Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER PATCH .....	\$ 3.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1985 ART PRINT "Big Woods Bobcat" .....	\$125.00
_____	1984 ART PRINT "Dutch Country Bluebirds" .....	\$125.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

## Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

## Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 charts) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

## SPORT Items

_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

## GAME NEWS

_____	1 Year Subscription .....	\$ 6.00
_____	3 Year Subscription .....	\$ 16.50
_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 3.50

## Waterfowl Management Stamps (Voluntary)

_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



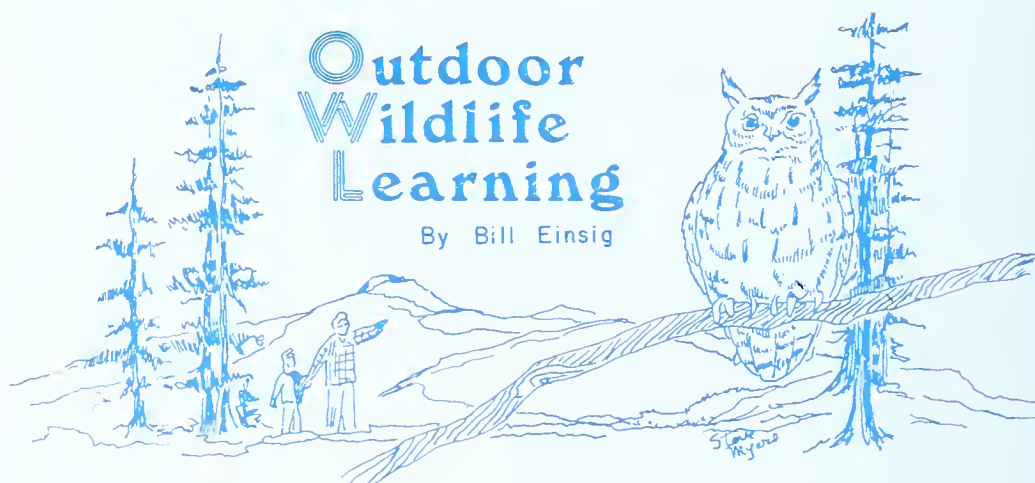
# young artists page



Chris Vaneman  
Kane, Pa.  
Kane Area Senior High School  
12th Grade

George Nice  
Sweet Valley, Pa.  
Lake Lehman School  
8th Grade





Classroom plants can be valuable teaching tools. Alert teachers can use them to illustrate many aspects of plant growth, such as types of root systems, leaf modifications, epidermal tissue, flower structure, and much more. Perhaps most important, a good collection of plants can demonstrate the wonderful ways in which adaptations have equipped plants to survive in changing environments. That concept is central to understanding wildlife species as well.

But it is not easy to maintain a variety of plants in the average classroom. Temperatures often vary too much, watering is often forgotten or overdone, and sunlight is likely to be too dim or too bright. Most of our native plants would be difficult to keep in such an unpredictable environment.

However, a number of house plants available from your local nursery are easy to grow in the average classroom and are educationally useful. With the help of a friendly nursery operator, Barbara Forgas, Lewisberry, I've made a list of some easy house plants to grow. All of these seem to thrive on neglect—which makes them particularly suitable for me.

In general, the following plants prefer warm temperatures but will tolerate cooler periods when the thermostat is turned back. All grow best in relatively dry soil. In fact, the easiest way to kill some of them is to water them too frequently. Most can be left to dry until the first sign of wilting and still respond quickly to a thorough watering.

This list is not intended to be a complete horticultural guide to these exotic species. It only provides a starting point with a few comments to pique your interest.

### **Aurora Borealis** (*Kalanchoe fedtschenkoi*)

More than 100 kinds of *Kalanchoe* are native to Madagascar and tropical Africa. *Aurora* is responsive to day length and normally blooms in January and February. For this reason, it bears the common name of Valentine Plant. However, it can be forced to bloom at Christmas if given fourteen hours of darkness each day during the month of September. Try peeling the epidermis from the thick, succulent leaves.

### **Burro's Tail** (*Sedum morganianum*)

This native of Mexico has a soft, fuzzy leaf and a spicy scent. It can be grown as a trailing or hanging plant. Its leaves will root in damp sand in a matter of days, making it ideal for a variety of student projects.

### **Candelabra Aloe** (*Aloe arborescens*) **Medicine Plant** (*Aloe vera*)

Historians tell us that the mighty Roman legions carried aloe with them to provide quick relief from wounds. Even today, the sticky juice is used to form a protective shield over minor cuts and burns. The aloes are native to Cape Verde, Canary Islands and Madeira.

### **Chinese Evergreen** (*Aglaonema modestum*)

Mottled leaves and lily-like flowers mark this native of southeast Asia. It blooms in time for Easter if fertilized about one month prior to blooming date.

### **Crown of Thorns** (*Euphorbia splendens*)

The species name "splendens" means "shining" or "bright," and refers to the bright red flower bracts. Youngsters will most ad-



mire the thorns that guard this plant. Give it enough sunlight and it will grow as an upright plant, while less light will cause it to lie over and sprawl along a countertop. It blooms in time for Easter if fertilized in early March.

**Devil's Tongue** (*Sansevieria zeylanica*)  
**Snake Plant** (*S. trafisciata*)

This common house plant is said to be "gourmet food for elephants" in tropical Africa where it grows wild. The Snake Plant is the taller of the two and bears horizontal bars reminiscent of the markings on some snakes. It can be made to bloom before the end of school if fertilized after Easter. *Sansevieria* demonstrates growth from vigorous rhizomes and pieces of leaf will root if set in wet sand.

**Emerald Ripple** (*Peperomia caperata*)  
**Leather Peperomia** (*P. crassifolia*)

More than 1000 species of *Peperomia* are native to South America and the islands of the Caribbean. In their native habitat, they grow on the jungle floor where light is dim and temperatures warm—the same conditions found in most homes. Both species exhibit a wide variety of leaf forms, textures and colors, making them ideal for a classroom collection. Compare the lower epidermis of *Peperomia* with that of *Kalanchoe* or *Tradescantia*.

**False African Violet**  
(*Streptocarpus saxorum*)

*Streptocarpus* grows well in cooler and drier conditions than does the African Violet. It can be kept in bloom almost constantly and its ripened seed capsule splits into two twisted halves, hence the genus name meaning "twisted fruit." This plant comes from the Cape of Good Hope, South Africa, and is also known as Dauphin Violet or, more generally, a type of Cape Primrose.

**Grape Ivy** (*Cissus rhombifolia*)

This is not a true grape, but the leaves and tendrils are similar to some wild grapes. It grows easily as a hanging plant. The species name refers to the diamond-shaped leaves of this vine from the West Indies and tropical Americas.

(*Crassula argentea*)

This common succulent from South Africa is very adaptable to temperature variations. Its thick leaves will root making it valuable as a demonstration of vegetative reproduction.

**Purple Heart** (*Setcreasea purpurea*)

This native of Mexico produces a cradle-like flower which appears to hold a small baby (another common name is "Moses in a Cradle"). The leaf is two-tone; green on top, purple beneath. The plant can be placed outdoors in summer, where it provides good contrast with green foliage plants.

**Sago Palm** (*Cycas revoluta*)

This plant illustrates the confusion caused by common names. It is not a true palm and it is not related to the true sago palm which really is a palm. Instead, it is a member of the cycads, a group of ancient plants that were most abundant during the time of dinosaurs. The cycads produce no flowers but form cones on separate male and female plants.

Sago, a starch flour, is made from the pith of cycas and certain true palms in Japan, India, and other parts of Southeast Asia. This is the only palm-like plant really suitable to the average classroom.

**Wandering Jew** (*Tradescantia fluminensis*)

Biology teachers are familiar with this plant because it has become the classical specimen used to illustrate the structure of stomates in the epidermis. It is an old-time plant and was passed from gardener to gardener by simple cuttings long before houseplants were sold commercially. Its common name was taken from the Jews of Europe who wandered without a homeland to call their own.

**Weeping Fig** (*Ficus benjamina*)

This is perhaps the least tolerant plant on this list. It requires warm temperatures and may be adversely affected by the drop in temperature most classrooms experience on winter weekends and holidays. It is a kind of rubber tree and a native of India and Malaysia. Students can experiment with air layering of its woody stems.

**M**ARCH signals a break in the weather which wildlife and conservation officers alike have eagerly anticipated for months. It also brings trout stocking and the emergence of the black bear from hibernation.

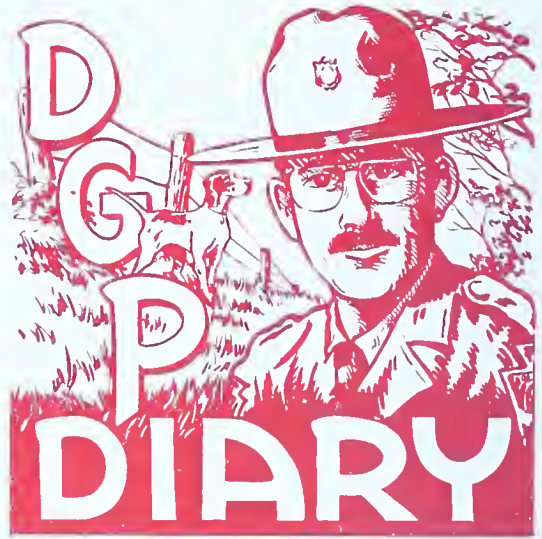
*March 1 & 2*—I am officially off duty and attending on my own time an advanced officer survival seminar at Luzerne County Community College. I am in class from early morning until late evening both days, but it is well worth it to study with some of the country's foremost police tactics experts.

*March 3*—It is the day before the extended beaver season opens and I receive a tip from a man who has witnessed several individuals setting traps along Hicks Run. The informant tells the location of the illegal sets and indicates that the early trappers made no effort to hide their actions. Even though it is after dark, I check the area by flashlight and locate several sets which are properly tagged. I leave the area with a gut feeling that something just isn't right.

*March 4*—I am on the road by 5 a.m., picking up Deputies Bill Olivett and Bill Smith to stake out the early beaver sets. Smith and I both have portable radios and Olivett stays with the marked state vehicle in case a road stop becomes necessary. Smith has forgotten his hip boots so I lend him my new pair and don an older set. While crossing Hicks Run I find out that I've made a mistake, as my one boot leaks. The next several hours in below zero temperatures are mighty uncomfortable.

Hidden back in the woods, I try not to think about my cold feet. When the sun finally comes up enough to see, I notice that almost all of the buds on every tree and bush have been browsed off by deer. I recall some of the things mentioned at the deer management seminar the previous month, such as indicators of a deer herd which is out of balance with its range. I can't think of a better example and wish I could show some of our skeptical sportsmen this area.

Finally, just after noon, the trappers show up and are apprehended after they have checked their sets. Again, they have made no effort to hide their actions and do not appear apprehensive when we approach them. They claim that their local radio station had announced the beginning of the extension as being the 3rd not the 4th. Vir-



**By Joe Carlos**

**District Game Protector  
Cameron County**

tually everyone that we cite has an excuse or a story, and after awhile it is easy to become callous. Fortunately, almost every game protector develops a sixth sense and can spot most lies in an instant. I don't sense that with these men, however, and upon conferring with the two deputies we agree that this, along with the defendants' actions, indicates the need for further investigation. We take down all the information necessary to file delayed citations and note that one trap is improperly tagged.

Over the next few days, through cooperation with Game Protector Ray Lizzio in whose district the trappers live, along with a lot of long distance phone calls, it is determined that the trappers were indeed ill advised. As the season was an extension, the dates weren't printed in the Digest which each sportsman receives with his license. The only thing these men had to go on was the misinformation broadcast by the radio station. They had acted in good faith, and Officers Smith, Olivett and I agree there is no way we can prosecute them for an honest mistake which would carry a penalty as severe as that assessed for deliberately jacklighting a deer. They pay a \$10 fine later in the week for the improperly tagged trap and we all feel that justice has been properly rendered.

*March 7*—District Game Protector Harold Harshbarger and I spend the day investigating a case involving the illegal



possession of a deer. This time as we interview defendants our sixth sense tells us they are holding something back, and I am forced to file citations totalling \$600.

*March 11*—Game Protectors Harold Harshbarger, Leo Milford, and I are conducting a dinner meeting this afternoon for Elk and Cameron county deputies and their wives. As a special treat, Charlie Baker, a foreman with the Bureau of Forestry who has been a volunteer with the bear research program since the 1970s, puts on his black bear slide talk. After the program Charlie is pleasantly surprised by being presented with the Game Commission's highest commendation, the Senior Wildlife Conservation Award, for his efforts over the years. Charlie, who has handled literally hundreds of bears and virtually ran the Sinnemahoning check station, has earned the award and the title "bear expert." Jerry Zeidler, law enforcement supervisor for the Northcentral Region, is on hand to help me present the award.

*March 17*—We are conducting one last cram session for the deputy applicants.

*March 18*—This is the day of reckoning for our deputy applicants. We travel to the regional office for a grueling exam. For months, in anticipation of this test, each of them has been studying the Game Law, wildlife management, Pennsylvania geography and history, math, and even spelling. They have also undergone a rigid character investigation. Prior to allowing them to take the test, I discuss each of them with members of the news media, district attorney, chief of police, sheriff, state police, district justice, county agent, district forester, waterways patrolman, fellow deputies, and selected officers of each sportsmen's club. There is no room in our organization for a bad apple. The three applicants for this year have passed all these preliminary tests with flying colors, and all are confident when they emerge from the examination room.

*March 21*—I am spending the day in Brookville with County Agent Rod Keniston, attending a forest insect meeting. Although I am a graduate forester, I have been away from entomology for a number of years and I am particularly interested in learning more about the gypsy moth which has been defoliating much of northcentral Pennsylvania in recent years. I am inter-

ested in the impact of this on the wildlife resource. I find out that numerous other insect pests are at work as well, and that even the gypsy moth may not be all bad for it creates openings in the forest canopy, allowing sunlight to reach the forest floor. This results in seedling growth beneficial to the white-tailed deer. It just goes to show that nothing is simple in wildlife management.

*March 22*—Waterways Patrolman Stan Hastings and I are meeting with representatives of Hammermill Paper Company. Hammermill Company is a large owner of land which cooperates with the Game Commission in an agreement known as Forest-Game. Under the contract, they allow public hunting on tens of thousands of acres of their land; in return we patrol the area and police their closed roads. To aid hunter access, I am interested in opening as many roads in the Sterling Run area as possible. However, we agree that in order to protect some Class A trout waters and several snake dens, a number of the roads will have to remain closed to all vehicles.

*March 23*—I assist Stan Hastings with fish stocking on Mix Run.

*March 25*—I instruct a firearms training course for the deputies, incorporating some tips from the seminar which I attended earlier in the month.

*March 28*—This morning all Northcentral Region officers meet at Scotia Range near State College for training in the use of our newly issued dart guns. In the afternoon I instruct in firearms use, incorporating some techniques learned from Jeff Cooper at Gunsite a few years back.

In the evening I assist Instructors Al Brown, John Schatz, and Leroy Skinner with a Hunter Education course.

*March 31*—I attend the Spring Conservation Forum at the Sinnemahoning Sportsmen's Club. It is an unusual opportunity where a group of conservation minded men and women can get together and talk with some of the best minds in the natural resources management field. One such person is Ralph Abele, Executive Director of the Pennsylvania Fish Commission. Mr. Abele and I have lunch together, discussing items common to both the Fish and Game Commissions.

IT WAS JUST last season, and I'm still not sure what to make of it. I was hunting grouse in a little cover near home. I flushed a woodcock, and, since we don't often eat woodcock (their earthworm diet invests their flesh with a certain murkiness that my wife finds disagreeable), I let him go. He dodged a hawthorn and veered across a clearing, no doubt expecting a load of 7½s; I'd have given him just that, had I known then what I know now.

The woodcock was having trouble flying. He seemed to be carrying something in his bill, something resembling a leaf. As he struggled to top the alders, he dropped his burden, and down it fluttered. I went over and picked it up. It was an envelope, the size of the ones used to announce weddings. No stamp, pale brown. Something was written on it. I squinted, held the envelope in the light, and peered closer. Tiny characters in a cramped hand: "To the Lancaster County Pheasant Committee."

The flap was securely glued, but I tore it open and unfolded the sheet inside. "Dear Friends," the letter began, in a purple ink that looked rather like pokeberry juice. "Thank you for your letter of 18 March, last. We trust that you are prospering, and that your wise and multitudinous clan will again weather the annual onslaught.

"Your report, which we received this spring by woodcock courier, promises to help us greatly. We plan to implement several of your suggestions this fall. They should have the happy effect of rendering still more ineffectual our common enemy who stalks the fields and forests of the land.

"We, the Centre County Grouse Committee, would like to pass on to you some of the methods *we* employ against the Orange Horde.

"Our basic strategy has always been to fluster the enemy. There are a number of ways to do it. The ultimate goal is to get an Orange so excited that he misses his shot, or fails to shoot, or slings his shells on the ground and smashes his stick against a tree.

"For many generations we tried to



*Chuck Fergus*

accomplish our goal by sitting tight as an Orange approached, then flushing loudly and quickly placing a tree between ourselves and the enemy. Or, we would hold until the Orange walked past, and then fly back the way he had come. We relied on rather straightforward tricks, such as flushing when our pursuer's back was turned.

"The Orange Horde refused to be deterred. Year after year they appeared in ever-increasing numbers. They stamped through our homes, pursuing us from the time the leaves fell until snow covered the ground. They hunted singly, and in packs; they used dogs. Soon we were forced to seize every advantage.

"Now we flush at the merest glimpse of orange, the faintest crunch in the leaves. We flush at exceedingly inopportune times, as when an Orange is bent over, fiddling with the top of his foot. When he is halfway through one of the wires that his kind strings along the edges of fields. When he is among thin, dense saplings that impede the movement of his stick. When he is sitting, feeding. When he is watering the ferns.

"We watch for him to lean his stick back against his shoulder. This stance, we have learned, signals that he is weary, and with the stick so suspended an Orange cannot react quickly enough to shoot.

"Lately, we have taken your advice:



We run. Especially if the Orange has a dog. We wait until the dog has frozen onto point, head down, nostrils full of our musty scent, eyes bulging; and we creep away through the weeds. The dog's eyes bulge even huger. He begins to tilt forward. Before he can topple, he takes a few quick steps, which the Orange seems to find objectionable. Often we entice the dog into leaping after us, making the Orange even more furious. He whistles, he shouts, he throws the orange part of his head on the ground.

"We have not yet used your strategy of hiding under the Oranges' automobiles. Nor do we run among chickens or guineas or others of our clan under Orange dominance. We do like to feed among robins in a grape tangle; when an Orange shows up, we linger, picking up grapes like mad, until the robins flap out and the Orange flicks his stick at them, fooled by the squawking and fluttering. Then, when he lowers the stick and turns away, we flush. Often he spins around and shoots, showering himself with grapes and bark, his face assuming the color of his coat. Or, he doesn't even bother to turn around. His shoulders slump and he appears to deflate; talking to himself, he walks away.

### Land on Pine

"After we flush, we fly fifty or sixty yards and land. Not on the ground, but on the branch of a pine, where the needles are thick enough to shield us, scattered enough to let us see out. If the Orange follows, we let him come close and home in on a likely patch of cover, and then when he is straining and peering into it, we dash out above his head. Often we hear a long, mournful wail as we skim through the trees. We land. In another pine, of course.

"We have achieved a certain success through drumming. The Orange, we have learned, interprets this activity as 'autumn recrudescence,' a technical term implying a resumption of vernal breeding rites brought on by day-length periods matching those in the spring. In fact, we drum to attract Oranges. Sup-

pose an Orange enters a cover and hears a grouse drumming. Instinctively he heads for the sound. The drummer, when the Orange approaches, runs safely out of stick range and flushes. The Orange hears him go. Then he hears another grouse drumming elsewhere in the cover. The Orange turns and heads for the new sound. The second drummer lures the Orange in and then flies off. A third drummer begins. And so on, until the Orange is led out of the neighborhood.

"Often we band into groups during the time of the Horde, and when an Orange approaches we depart at intervals and in different directions. The Orange faces one way, then the other; he gets ready to shoot, then leaps around at the sound of a bird flushing a little closer. Not infrequently, he fails to discharge his stick.

"If two Oranges are hunting together, we find it advantageous to hold and run back directly between them. The goal, of course, is to make the Oranges dive for cover, each fearing the wrath of the other's stick.

"We appreciate your suggestion about cackling when we lift from the ground, and we realize how such an utterance could unnerve an Orange. But we are not a vocal tribe. When taking off we sometimes mutter a few profanities, largely for our own benefit. We suspect that our wingbeats have a similar effect to your cackling. We try



## The Wingless Crow

*The Wingless Crow* is a 200-page hardcover book made up of thirty-three of Chuck Fergus's "Thorn-apples" columns which have appeared in GAME NEWS. Wonderful reading for your own collection or as a gift. Order from the Game Commission, Dept. AR, Box 1567, Harrisburg, Pa. 17105-1567. \$10 delivered.

to flap up as loudly as we can, even to the point of whacking our wings against branches. Or, if we are feeding in small trees, we glide silently off the perch.

"Sometimes, if an Orange has us dead-to-rights — if there is no other way out of the situation — we fly straight at the end of his stick. This approach is dangerous, but, if successful, vastly satisfying. The Orange is left mouth agape and stick smoking, body twisted into a knot, an anguished look on his face that we note fleetingly as we angle

off through the woods. Some of our number make a practice of flying this hazardous route. They last a surprisingly long time.

"We must close now, for the time of the Oranges is upon us. In several days the Horde will also visit their aggressive attentions upon your number. May you circumvent them in every way. May you lead them through the thorniest hedges and the boggiest swamps. May you leave them weary of body and feeble of mind, dashed in spirit and empty of hope.

"We look forward to your reply next spring, and will watch closely for the woodcock coming north.

"Sincerely, the Centre County Grouse Committee."

I looked up, shaking my head; my mind was dark. I had a headache. Whether from straining to read the tiny scrawl or thinking about the hunts to come, I wasn't sure. I dug around in my game vest and found a book of matches. I lit the letter and watched the ashes drift to the ground. Nobody would believe it, anyway.

## Books in Brief . . .

(Order from publisher, not from Game Commission)

**The Art of Hunting**, by Norm Strung, The Hunting & Fishing Library, 5900 Green Oak Dr., Minnetonka, Minn. 55343, 160 pp., large format, \$14.93. Loads of practical information put together in a book that would look at home on your coffee table: high-quality glossy paper and hundreds of outstanding full color photos. This is Norm's fourteenth book (he's also published over 1000 magazine articles), so you can be sure he knows his subject. Even a nonhunting wife will look at this one.

**Modern Falconry**, by Jack Samson, Stackpole Books, P.O. Box 1831, Harrisburg, Pa. 17105, 160 pp., softbound, \$15.23. Falconry is a subject few persons know much about. Samson, former editor of "Field & Stream," has drawn on years of experience as head of the American Museum of Natural History's raptor division at Trailside Museum, and deep personal interest, to produce what he calls a modest manual intended to help beginners discover the joys of this sport. It discusses acquiring and training hawks, caring for them, and equipping them for hunting. There is also historical background on falconry and information on regulations covering this activity.

**Lyman Shotshell Handbook**, 3rd ed., C. Kenneth Ramage, editor, Lyman Products Corp., Rt. 147, Middlefield, Conn. 06455, softbound, large format, 312 pp., \$16.95. Primarily a reloading manual for all shotshells from 410 to 10 Mag, this big book also includes excellent articles by Don Zutz and Tom Roster, historical background on the Lyman Corporation — now over a century old and long known for its metallic and scope sights as well as reloading items — and step-by-step shotshell reloading technique.



Sherwood Schoch shot to. . . .

# A Career in Archery

By Keith C. Schuyler

Photos from the Author

LITERALLY thousands have profited somewhat from their association with archery. With the obvious exceptions of those who have made it big in manufacturing archery equipment, such as Fred Bear, Tom Jennings, and Ben Pearson, most of these must supplement their financial end of the sport with another means of income.

Practically all, however, first fell in love with archery before they acquired a more practical means of staying close to it. Only a relative few have been able to live off the sport and still enjoy it to its fullest.

An outstanding example of those who have gone all the way with archery is Sherwood Schoch—bow hunter, writer, lecturer, editor, naval aviator, amateur and professional archer, sales manager, manufacturer's representative—roughly in that order. The word *roughly* is used advisedly, as this affable salesman still participates in most of these activities, time permitting, as owner and manager of Sherwood Schoch Associates, Inc., Route 562, R.D.2, Douglassville, PA 19518.

My first association with Sherwood came in the middle 1960s when he was the editor of TAM (*The Archers' Magazine*), where he had first signed on as advertising manager, then writer, then editor, and later general manager. I had written for TAM before Sherwood's arrival and prior to beginning this column. There was a time later when he needed an article for his magazine and I needed photos for a column and ran into a conflict of schedules. Sherwood received his article and I received my photos from him in a swap of convenience.

Sherwood Schoch was born in a rural area of Berks County near Boyertown,



**SHERWOOD SCHOCH** has lectured on archery for many years. Here, in 1974, he addresses the Millersville State College archery team.

and he can still drift into a Pennsylvania Dutch dialect at the drop of a joke. In 1952 he was graduated from Boyertown High School, where he had majored in baseball was an all-star center fielder. In late 1955 he enlisted in the U.S. Navy and two years later received an appointment to officer's candidate school. He entered the aviation cadet program the following year at Pensacola, Florida, and became a Naval aviator in February, 1960, finishing third in a class of 250. For two years he flew jet fighters off aircraft carriers, and in connection with this had his first experience in instructing others, which would serve him well in his ultimate vocation. As a flight instructor, his association with guidance systems, missiles, and other directional components developed a personal in-

terest that carried over in his attraction to archery. He set an unbeaten record in air-to-air naval gunnery with 34 percent of 200 20mm cannon shots at 30,000 feet into a target banner being towed at 450 knots an hour.

Actually, Sherwood's initial interest in bows and arrows came at an early age when his father made his first bow from a hickory limb and he cut willow sticks to use as arrows. At 17, he bought his first hunting license to hunt deer with the bow. His first big game hunting success with a bow came in 1955, and was the first in a succession of trophies that has included five black bears. We were hunting together in Maine when he shot his first bruin.

Meanwhile, he became interested in merchandising, and he started the first archery magazine devoted to that subject while still with Stump. With only the name, *Archery Merchandising*, for a beginning, he put the first two issues together in his living room. He also solicited advertising to support printing of these issues, and the retail side of the sport had its initial trade publica-

tion. Although *Archery World* was later sold to Market Communications in Milwaukee, *Archery Merchandising* remained in Boyertown for some time and later became known as *Archery Retailer*. It is now owned by the same company that acquired *Archery World*, Winter Sports Publishing Company of Minnetonka, Minnesota.

### Organized Shooting

While all this was happening, Sherwood Schoch became interested in organized target shooting with the bow. He had early success and continued shooting for many years as an adjunct to his commercial associations with the sport.

Shortly before leaving *Archery World*, Schoch joined with his friend Henry Fulmer to open Bows and Arrows Archery Shop near Boyertown in 1966. He sold his interest in this modest venture to Fulmer when he left the magazine to take a sales position with Bear Archery Company.

His first assignment took him to Texas, Oklahoma, Louisiana, and New Mexico, where he remained for a year before being transferred to Wisconsin. In the reorganization of Bear's sales force, two other salesmen were provided to assist, but Sherwood had been nurturing a desire to become independent. So, at the end of 1969 he left Bear and picked up several other companies to represent as he hit the trail. Within four years he had acquired three other fulltime salesmen and was covering twenty states.

In the same year, 1974, he incorporated as Sherwood Schoch Associates, Inc., and continues to operate a sales office with six fulltime salesmen at Douglassville. He had been with Jennings Archery Company from 1972 to 1982, when Bear Archery Company took it over.

During ten years of association with Jennings, Schoch had served as marketing director, sales manager, marketing consultant, product development consultant, and personal friend of the California "father of the compound bow,"

**THIS NICE whitetail was taken by Schoch more than 20 years ago with a Bear Super Kodiak bow, one of a succession of archery trophies.**





## STRAIGHT FROM THE BOWSTRING

while continuing his own business. Beginning this year, he is representing Bear and Jennings in a twelve-state area, with Pennsylvania as headquarters.

Schoch's travels around the country have provided him numerous opportunities to sample bow hunting in various states as well as to take part in many archery tournaments. They also gave him a chance to expand on the lecture series he has presented to thousands of archers over the United States. He has held seminars in conjunction with many of the major tournaments in National Field Archery Association, Professional Archers Association, and individual state associations. He participated in the first National Rifle Association bow hunters seminar at Philadelphia two years ago.

Sherwood Schoch's commercial association tends to cloud his very considerable accomplishments as both a participant and a teacher in archery. A tabulation of his minor wins would be monotonous, for, as he says, he has "a cigar box full of medals" from Pennsylvania State Archery Association tournaments. But Pennsylvania provided his first big triumph six months after he began tournament competition in 1964, when he won state Class A instinctive at the PSAA tournament held at Fairmount Park, Philadelphia. The following year he won National Field Archery Association's national tournament bare bow class at Watkins Glen, New York. In 1966, he became state freestyle champion at the indoor Pennsylvania state tournament in Altoona.

While in Texas, he won the state championship for 1968 in adjoining Louisiana. A year later, while working in Wisconsin, he won that state's annual tournament. On his return to Pennsylvania, he won the 1970 professional

freestyle division with records that stood until the round was changed. He shot a 552 hunter round using a Damon Howatt recurve with a regular sight.

All Schoch's tournament successes were with the recurve bow. He admitted, with a grin, "I shot competitively with the compound, but I was getting older and more tired and didn't win much." But the last tournament in which he shot, the Southeast Pennsylvania regional championship in 1978, he won.

Sherwood joined Professional Archers Association in 1967 to make personal associations and for the enjoyment of it. When asked whether he made any money at it, he answered somewhat ruefully. "No. In 1970, I was third highest money winner in the circuit. About \$1,460." Did that pay expenses? "Not really. A matching contract with Damon Howatt for wins with the company's bow doubled my money and might have covered expenses that year. However, it did pay off further in getting to know more people in the archery business."

**MOST OF SCHOCH'S** time is taken up with archery, one way or another. Here he waits patiently on a stand in Pennsylvania's deer woods.



## Please Note . . .

**If you have any reason to contact us about your subscription, be certain to accurately list your Account Number (the top line of letters and numbers on the mailing label affixed to the back cover of your magazine). This will provide us with immediate access to the computer's data banks and will help us resolve your problem quickly.**

Like so many with varied careers, Sherwood says many of his greatest satisfactions have come from teaching others. His personal efforts and experiments were funneled into studies of bow dynamics and attachments such as cushion plungers, arrow rests, etc., to get top performance out of both bows and arrows. He created a program, Compound Bow Appreciation, which Larry Wise, professional archery champion, has expanded upon and furthered.

"Larry is a true educator," Sherwood explained by way of compliment to him, "a real professional."

One of the real educational highlights of Schoch's experience was his participation in National Archery Association's Penn State Extension Program at Stone Valley. He shared it with Pat Baiers, Julia Bowers, and Bud Fowkes, 1972 Olympic coach. From it evolved the NAA Instructors Manual, co-authored by the four and still in use today. The Stone Valley Program was established to certify instructors for NAA.

From the standpoint of instruction, Schoch's prime pupil was Steve Leiberman, who went on to become a world champion.

Although Schoch's personal shooting has been primarily with the NFAA and PAA, he holds life membership in Pennsylvania State Archery Association.

Among his personal accomplishments was his induction into the Trade Hall of Fame at Anderson Archery Clinic in Michigan last year, the first to be so recognized. He was followed by Fred Bear and Tom Jennings. Aside from their working relationships, he counts both Bear and Jennings as personal friends. In 1984, Sherwood spent ten days hunting with Fred Bear.

Sherwood Schoch still counts hunting with the bow and arrow as his chief source of enjoyment. Some years ago an uncle introduced him to deer hunting in Sullivan County. In 1963, his father and he purchased a property near Dushore which was since been refurbished and expanded into a home. Since March, 1982, Sherwood has been a resident of Sullivan County, although he still maintains his sales office in Douglassville. The "cabin" on Route 220 is now named Wesley Lodge after Sherwood's father and hunting partner who died in 1978.

Although his work has enabled him to hunt most of the states in the Southwest and the northern tier of the United States, and into Canada, Sherwood still looks forward to the October archery season in Pennsylvania. He can also be expected to continue his seminars on the compound bow, technical arrow tuning, shooting techniques, and bow hunting. Although Sherwood says that "... teaching allows the teacher to leave some of himself with the student," there is still enough of him left to go around a long way.

With a grin.

## Thoughts While Walking

*Art involves proportionality and subtlety—the ability to approach the edge of excess without falling in.*

—George Wills



# The Trade-In

By Don Lewis

Photos by Helen Lewis

**"I'M GOING** to lay it right on the line," the caller said. "I know you're not in the gun repair and selling business any longer, and I figured you would be impartial and give me a straight answer."

"I'd give you a straight and impartial answer no matter how many businesses I was in," I replied. "Seriously, what's on your mind that you need a straight answer?"

"What's your opinion on buying a used rifle? I've been hunting for several years with a relative's rifle, but it was sold with his estate and I can't afford a new outfit right now. I have a chance to buy a rifle that's seen a lot of use, and it's within my budget."

"That's not an easy question to answer without first seeing the rifle. There are many factors to consider. What outfit are you considering?"

"An old one," he said jokingly. "When I told you it's seen a lot of use, that's the solid truth. It's a very old 99 Savage that has a Bausch & Lomb scope on it. A friend took it as part of a trade for a horse, and would like to convert the rifle into cash. I have no idea when the rifle was purchased, but my friend was told the scope was bought in 1952. That makes the scope over thirty years old and the rifle is probably a lot older. Would I just be throwing my money away?"

"I can't honestly answer that without first checking it out. Apparently,



**RON LANTZY** examines an aged Central Arms 12-gauge double. Although made many years ago, the gun is still in usable condition.

you have looked at the outfit, and you must feel it's worth the asking price or you wouldn't have called."

"I did more than just look. I fired a couple of shots at a gallon can about 40 yards from me. The scope is battered a little but it's clear and sharp. The old rifle is worn white on the outside, but the barrel is bright and appears in good condition. I hit the can both shots, and I didn't experience any problems feeding the shells in and out. I really put the rifle to a good test, but I'm afraid it might be shot out since it's so old."

Our conversation ran back and forth, and I gathered he was somewhat embarrassed over buying a used outfit. He was afraid the rifle might be shot out and inaccurate. I gave him a few pointers on what to look for and assured him that there was little chance the rifle was shot out or not accurate enough for a hunting rifle, as the bore didn't show any signs of rust and pitting.

I guess all of us fear getting a bad deal on a used item, be it a car or rifle. It's probably fair to say there are less risks involved in buying a used firearm than a used car, refrigerator or camera, and I'm not just singling out those particular items. It's also fair to say there are built-in risks in buying anything used. After all, the warranty period is normally very short and time itself takes a certain toll. However, we tend to magnify our fears. The hunter mentioned was deeply concerned about the age of the outfit even though it functioned properly and the scope was bright and clear. His main fear stemmed from a time-worn myth that old rifles are automatically shot out. I may be going out on the limb when I say "shot out" is a misnomer in describing the condition of the bore in old rifles. "Wear out" from improper cleaning procedures or "rust out" from neglect would be more applicable.

I have been associated with guns for most of my 63 years, and I honestly can count on one hand all the old rifle barrels I've checked that could be classified

**VARMINT-WEIGHT 219 Donaldson Wasp was traded in because case making was difficult. For shooters who don't mind tinkering, such rifles can be excellent buys and give top service for decades.**



as shot out. I saw a lot of ruined barrels during the time I wore a gunsmith's apron, but most had met their demise from neglect, not from overshooting. Let's look at this in a practical sense.

Assume that old 99 Savage has been purchased in 1933. That would make it 50 years old at the time it became a trade in. Let's also assume its original owner was a dyed-in-the wool hunter who checked his rifle's sight alignment several times a year. Getting back to figures, let's say a box of shells was fired each year just to check the sights. Simple arithmetic proves that  $50 \times 20 = 1000$  rounds. So far, so good.

### Picture Changes

The shooting picture changes drastically when we switch from the range to the woods. In other words, the rifle wasn't fired 1000 times in the woods, but to make certain we aren't short-changing the subject, we'll say the rifle was fired 10 times during the course of each big game season. That's 500 more rounds. Over a 50-year span, we come up with 1500 rounds. Just for good measure, let's toss in another 200 rounds classified as miscellaneous shooting. That figures out to 1700 rounds, or 85 boxes of ammo consumed by the old Model 99 during its 50-year life span. To get to the heart of the matter, what will 1700 rounds do to a rifle barrel?

It might be pure conjecture on my part, but 1700 rounds of conventional ammo would have little impact on the life of a barrel, especially if the bore had been cleaned periodically. Notice I said "conventional ammo," which leaves out in the cold the hot loads so many handloaders are inclined to experiment with. You may wonder why I feel 1700 rounds wouldn't have a detrimental effect on a barrel. Let me explain.

It goes without saying that no one can say how long a given barrel will be accurate. In fact, the word accuracy as applied here is hard to define. For instance, a barrel that would be inaccurate for a competitive shooter could have a lifetime of hunting accuracy left

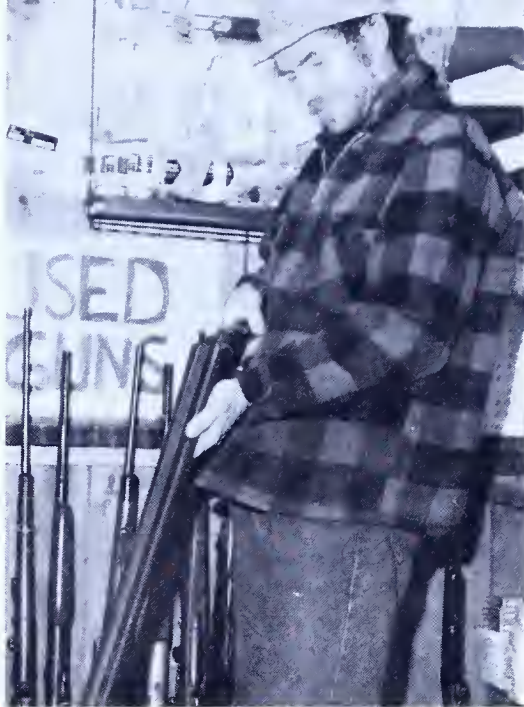


in it. To give some relative idea what to expect from a barrel, a benchrest competitor may dump a 222 barrel after 4500 rounds, and during the course of firing that many rounds, the chamber might have been cut several times. This is simply cutting off a portion of the rear of the barrel, pushing the chamber a bit forward in new metal, and running the threads forward to make up for those cut off.

It's really not the bore proper that goes haywire; it's a short portion of barrel just ahead of the chamber that is eaten out by blasts of superheated gases. I mentioned the 222 might go 4500 rounds before losing its one-hole accuracy, but a hotter cartridge like the 22-250 could be in trouble long before the 3000 mark. Here again, it will be primarily the throat that erodes first and allows gases to escape prematurely. The hotter the cartridge, the quicker the barrel dies—you can write that in stone.

Naturally, a magnum cartridge will wash out a throat quicker than a conventional cartridge. I might cite the 7mm Remington Magnum in comparison with the 7 x 57mm Mauser caliber. In the old military 7mm Mauser, chamber pressure with 140-grain bullet at 2500 fps might hit 38,000 pounds per square inch (copper units of pressure). The 7mm Mag. with the same bullet leaving the muzzle at 3100 fps could reach 52,000 psi. I surely don't have to point out why the magnum barrel is apt to wear out first.

Let's touch again on the hot load. To my constant amazement, the hand-loading fraternity is still bulging with handloaders who want to come up with a load that is super fast. There's a strange fascination about the hot load, and it has a mysterious pull many reloaders can't resist. I'm certain a small segment of reloaders won't agree, but nothing worthwhile is gained by exceeding the maximum load suggested for the powder being used. Truth is, the hot load shortens barrel life considerably. A barrel that might have retained decent accuracy for 4000 rounds with factory ammo or top quality handloads

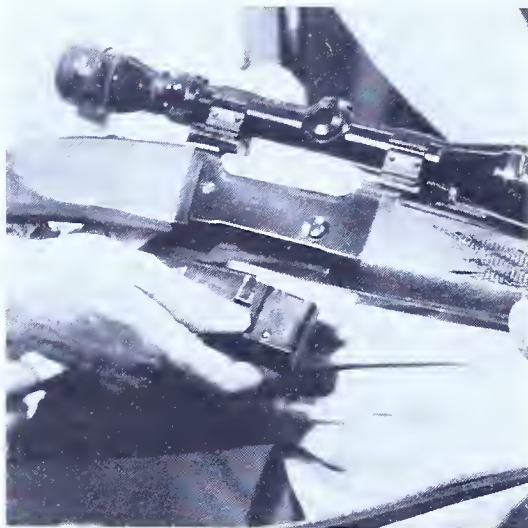


**CHRIS HENDERSON** checks hinge pin play on a used double. Too much wear here will let gun open when fired. Attention should be paid to such details before buying.

can be washed out in the throat and breech area with less than 1000 rounds of the hot stuff. Remember, the more powder you burn the quicker your barrel will lose its accuracy and some velocity.

Just for information purposes, let me toss in that throat erosion permits some of the hot gases to escape around the bullet. Velocity with the same cartridge will not be as high from a barrel with a badly eroded throat as it will be from a new barrel. Any rifle that has seen a lot of range testing eventually begins to lose accuracy and velocity as the hot gases chew away at the throat. A magnum cartridge with a velocity in the 3050 fps range may lose several hundred feet of its velocity when erosion in the throat acts as vents for the escaping gases.

I have no absolute figures to prove how long a barrel will last. Too many factors are involved. But from my own experiences and discussions with several barrel makers, the life of a hunting barrel that has seen reasonable care and hasn't been subjected to hot loads can



**PROSPECTIVE BUYER** checks detachable magazine on Savage M99C. This design makes for easy loading/unloading, but it's wise to check functioning.

be measured in decades instead of rounds fired. I was probably high in assuming that old 99 Savage had fired 1700 rounds. That particular type of rifle was basically a hunting piece back in Depression days, and was purchased years before handloading became popular. It could well have fired less than 1000 rounds instead of the 1700 I estimated. The probability is higher that it could have been worn out by improper cleaning methods. Working a cleaning rod vigorously can elongate the chamber throat. Grit and grime on the rod actually serves as an abrasive. On top quality varmint outfits, never put a rod through the bore without the use of a rod guide in the action to keep the sides of the rod from scraping against the throat.

I have dealt rather extensively with the barrel because in all fairness, that is the life of a rifle. It is the barrel that every buyer of a used rifle worries about. I would be far more concerned with the barrel on a varmint rifle than I would be on a 760 Remington or Model 94 Winchester. I have a 15-year-old No. 1 Ruger chambered for the 7mm Remington Magnum shell that hasn't consumed 400 rounds. It will cut 1¼-inch groups at 100 yards with hunt-

ing loads. I'll wager a set of scope covers that ten years from now it will still shoot like the dickens even though a few hundred more bullets will have ridden down the bore.

When buying a used big game rifle, be more concerned with the feeding and extracting mechanisms. Look for signs of abuse—bent barrel, rust and pitting inside and out, or a damaged stock. The barrel should be clean and bright, but there isn't much you can tell about the throat area without the aid of a borescope. When you purchase a used hunting gun of any type, have an understanding that it can be returned within 48 hours if there is a major problem. Reputable gun dealers won't sell a gun that has an obvious problem, but, in the accuracy column, they have only the former owner's word on that subject.

If the rifle is scoped with an inexpensive import, don't expect a guarantee on the optical sight. Normally, on top quality brands such as Redfield, Leupold, Burris, Bushnell and Weatherby, the manufacturer's guarantee covers internal defects that weren't caused by misuse or external damage. The gun dealer simply can't guarantee an optical sight.

### Operational Problems

In the shotgun category, the problems with the used outfit run more on the operational side than with the barrel. Old pumps can be worn beyond repair. Years ago I bought an old Springfield 12-gauge pump at an auction. It appeared in good condition and before taking it on a hunt I disassembled it completely and could see nothing wrong. Three fast shots on the range indicated it was still in perfect condition. But that wasn't the case, as I learned on the first hunt. The old gun had a feeding problem. Further range tests proved it wouldn't feed the second round over 50 percent of the time. I finally reached the conclusion that the feeding mechanism parts had succumbed to excessive wear. They weren't broken; just worn out. Replacement



parts were not available, and the old Springfield now decorates a friend's den.

Old double barrels are subject to internal problems that are hard to fix. Safes, hammers and special spring designs are the troublemakers with the aged double. Some can be fixed or replaced, but that can be costly. I would stay clear of an old shotgun of any type that had a part missing. It's next to impossible to find replacement parts for many of the brands of yesteryear, especially the less expensive models.

Usually there is nothing wrong with a trade-in hunting gun. For the most part, a vast majority of hunting guns are traded on new outfits. The smell of new blueing has a powerful influence on many of us. And there's nothing functionally wrong with the vast majority of our ex-military rifles; it's just that we want a new deer rifle. The powerful call of the magnum cartridge is still sending a lot of top quality conventional big game rifles to the dealer's used rifle rack. It's pointless to go any further.

March through late springtime is the prime period to buy a used rifle. It's still a long time to deer season, and most dealers order new guns in early spring; there's a need for extra cash and moving out the inventory of used guns



**ADJUSTABLE CHOKES** make shotguns versatile if they operate properly and are installed concentric with the bore. Turn choke through its full adjustment range to detect worn spots.

kills two birds with one stone—inventories come down and cash flows in.

Commonsense and listening to the advice of your gun dealer or gunsmith are prime requisites when considering the used hunting gun. The Ruger M77 RSI 308 I used last season might be considered a used rifle since it has seen two successful seasons, but it's as good as the day I took it out of the factory box. Truth is, there are a lot of used rifles and shotguns available now that fall into the same category.

If you're in the market for the first gun or a backup outfit, take a second look at the trade-in.

---

## GUNnews . . .

Five new 12-gauge buckshot loads have been announced by the Winchester ammunition operations of Olin Corporation. Three of the Super Double X Magnum Copper Plated loads are offered in 2¾-inch shells, two in 3-inch. They combine Super Grex buffering with hard pellets to improve pattern density at long range. A special wad absorbs shock and prevents pellet deformation. The 2¾-inch loads have either 9- or 12-pellet 00 Buck loads, or 34-pellet No. 4 Buck; 3-inch shells come with 15-pellet 00 Buck or 41-pellet No. 4 Buck. 5-round packs.

Conetrol is now manufacturing one-piece bases to permit low mounting of scopes on Ruger No. 1 Single Shot rifles. The base replaces the conventional Ruger quarter-rib, using factory holes, and places the scope farther back without the usual eyepiece overhang. Uses Conetrol scoperings. (Conetrol, Hwy. 123 South, Seguin, Texas 78155).

# *In the wind*

bob mitchell



New York has joined the list of states—including Pennsylvania—offering a voluntary waterfowl stamp and print program to generate funds for waterfowl habitat acquisition and management. The program will begin this spring with a Canada goose as the first featured species. Approximately half the revenue generated will be used to improve migratory bird breeding habitat in Canada where a majority of the waterfowl that migrate through New York are produced.

According to the Michigan Department of Natural Resources statistics, more than 100,000 deer a year are killed illegally there. State conservation officers feel most of these are taken by hard-core repeat violators in the business of supplying venison for the black market trade.

**The National Wildlife Federation received a \$45,000 contract from the U.S. Forest Service to compile a compendium of all studies—published and unpublished—on the grizzly bear. The report, which will also include summaries of over 60 topics affecting the threatened grizzly, is expected to take a year or so to complete.**

Seven endangered whooping cranes at the Patuxent Wildlife Research Center died this past fall of eastern equine encephalitis, a viral disease transmitted by an uncommon type of mosquito. The birds were part of a captive flock, which now numbers 32, used to produce offspring for reintroduction projects. There are an estimated 125 whoopers living in the wild today, up from the 15 known to exist in 1941.

The Washington Department of Game has begun a 3½-year study of mule deer in the state's Methow Valley, an area that provides winter range for over half the deer in one of the state's most popular deer hunting counties. The radio telemetry study, designed to determine deer movements to and on their winter range, is being conducted in anticipation of increasing residential and recreational development associated with a large ski resort complex being built in the valley.

The Nebraska Game and Parks Commission recently voted to prohibit the use of lead shot for waterfowl hunting beginning this year. According to the National Wildlife Federation, Nebraska is the first state to enact such a ban, but similar moves are being considered in Iowa, New Mexico, New Jersey and Florida.

The New Mexico Game and Fish Department is considering charging user fees for hunting, fishing, and trapping on federal lands. According to the Sikes Act, state agencies are permitted to charge such user fees on federal lands, provided the funds are used to enhance habitat on the specific areas for which the fees are charged.

Due to the efforts of a 10-year-old boy, the harshest penalties ever assessed for an endangered species case in North Carolina were levied this past fall. While fishing, the young boy and his family watched three men brutally kill a loggerhead sea turtle, a threatened species under the Endangered Species Act. Thanks to the family's testimony, the three men were convicted and assessed fines and wildlife replacement costs totalling over \$6500. Each of the three also received a six-month suspended sentence and was placed on probation, and two were each ordered to perform 150 hours of community service.

Through the first ten months of 1984, 800 phone calls were made to Minnesota's TIP (Turn In Poachers) hot line. Of these, 253 were investigated, 205 arrests were made, and 76 rewards totalling \$12,155 were paid. Less than one-third of the callers requested a reward. Of the 205 arrests, 109 were fish law violations; 42 involved deer; 22 were trapping related; 12, waterfowl; 7, small game; 6, bear; 4, nongame, and 2, elk.





Make check or money order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**  
P.O. Box 1567  
Harrisburg, PA 17105-1567

Shown here are seven of the publications now  
available from the Game Commission. In addition,  
Chuck Fergus's new book, a collection of his  
Thornapples columns entitled *The Wingless Crow*,  
can be ordered from this office for \$10. All prices  
include tax, handling and postage.

<i>Birds of Pennsylvania</i> , by James and Lillian Wakeley .....	\$10
<i>Mammals of Pennsylvania</i> , by J. Kenneth Doutt, et al. ....	\$ 4
<i>Gone for the Day</i> , by Ned Smith .....	\$ 4
<i>Pennsylvania Wild Game Cookbook</i> .....	\$ 4
<i>Pennsylvania Trapping Manual</i> , by Paul Failor .....	\$ 3
<i>Woodlands and Wildlife</i> .....	\$ 2
<i>Ducks at a Distance</i> .....	\$ 2



## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. If you are not sure of which maps you want, write for a PGC map order form.



# **PENNSYLVANIA GAME NEWS**

APRIL, 1985

60 CENTS





Make check or money order  
payable to:

PENNSYLVANIA  
GAME COMMISSION  
Dept. AR

P.O. Box 1567  
Harrisburg, PA 17105-1567

Shown above is the fourth in the Game Commission's annual series of embroidered patches and decals offered through the Working Together for Wildlife program. Funds derived from the sale of these and other selected items are used specifically for non-game research and management projects. Bald eagles, otters, ospreys and eastern bluebirds are just a few of the animals being helped in Pennsylvania, thanks to the people who've been supporting this program. This year's patch is priced at \$3, and the decal at \$1, delivered.



## The Deer Situation: Another View

THE WHITE-TAILED DEER is Pennsylvania's number one big game animal; there's no doubt about that. The black bear has received a lot of attention in recent years—deservedly so, for it's a great animal to hunt and makes a tremendous trophy if bagged. But there's no denying that almost ten times as many sportsmen hunt deer as bear in Pennsylvania. As would be expected from this, our hunters have a tremendous interest in whitetails. They write or phone to ask questions about deer or to report unusual experiences with them, and our mail indicates they like deer hunting stories so much they want to have some in each issue of *GAME NEWS*. As a result of this interest, almost everyone who owns a rifle and buys a license has his own ideas about the deer situation in Pennsylvania. So it's only natural that they develop opinions on how deer should be managed, how hunting should be regulated by varying seasons and/or bag limits, etc.

That's all well and good. Most of the time, any knowledge is better than no knowledge at all. But it doesn't hurt to recall the old adage which says "a little knowledge can be a dangerous thing." In regard to deer management, this can occur when individuals with high levels of knowledge about limited areas achieve a position of influence. Their common experiences tend to move them together, but their knowledge is so specialized, usually being based on hunting only, and so localized, that its overall relevance is limited. If their conclusions should be the basis of management for the entire state, great problems would result.

In contrast, those responsible for statewide management procedures must look at the big picture. The success or failure of any individual hunter is unimportant; one season Bill gets a deer, next season Joe gets one. The important thing is the success or failure of the whole state's management program. It's hard for some individuals to face that fact. I recently had a complaint from a man because he and his wife and daughter bagged only two deer last season; they usually got three, he said. That's the kind of comment you get from a person who considers only the narrow viewpoint.

In all candor I find it hard to understand the recent criticisms of Pennsylvania's deer situation. Over the past five seasons, 1980 through 1984, deer harvests, according to the cards returned by the hunters themselves, were 135,477; 148,530; 138,222; 136,293, and 140,180 respectively, for an average of 139,740. The reported kill for last season when criticism was so high in parts of the state (76,500 antlered, 63,680 antlerless) is higher than the five-year average. And as the reporting rate for 1984 turned out to be 55.1% for antlered deer, 50.1% for antlerless, the past season's calculated actual kill was 138,838 antlered and 127,106 antlerless, for a total harvest of 265,944.

Is it possible to look objectively at numbers such as these and conclude there's something wrong with the Game Commission's deer management program?

—Bob Bell

**Richard L. Thornburgh**  
Governor

#### COMMISSION MEMBERS

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doeblor, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

#### EXECUTIVE OFFICE

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starner**  
Comptroller

#### BUREAU DIRECTORS

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

#### GAME NEWS

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**GAME COMMISSION**  
(717) 787-4250

## FEATURES

<b>Audubon the Sportsman</b> .....	3
By Patrick V. McShea	
<b>Songsters of the Right-of-Way</b> .....	7
By W. C. Bramble, W. R. Byrnes and M. D. Sehuler	
<b>Answers to Some Spring Gobbler Problems</b> .....	10
By Wayne Bailey	
<b>Mr. Woodehuck, My Friend</b> .....	15
By George H. Block	
<b>Sizing Up Traps</b> .....	19
By Joe Kosack	
<b>Input From Field Officers</b> .....	22
By Joe Carlos	
<b>Small Game Wisdom</b> .....	26
By R. J. Savastio	
<b>The Maturing of a Hunter</b> .....	44
By Chris Dolnack	

## NEWS

<b>Books in Brief</b> .....	14, 53
<b>Field Notes</b> .....	34
<b>Conservation News</b> .....	39
By Ted Godshall	
<b>In the Wind</b> .....	64
By Bob Mitchell	

## COLUMNS

<b>Young Artists Page</b> .....	31
<b>Outdoor Wildlife Learning</b> .....	46
By Bill Einsig	
<b>DGP Diary</b> .....	48
By Joe Carlos	
<b>Thornapples</b> .....	50
By Chuck Fergus	
<b>Reading Range (Archery)</b> .....	54
By Keith C. Schuyler	
<b>Some Thoughts On Bullets (Guns)</b> .....	59
By Don Lewis	

COVER PAINTING BY MARK ANDERSON

PENNSYLVANIA CAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Second-class postage paid at Harrisburg, Pa. CHANCE OF ADDRESS: POSTMASTER: Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1985 by the Pennsylvania Game Commission. All rights reserved.

NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.



# AUDUBON THE SPORTSMAN

By Patrick V. McShea

THE WRITER does not brag about his skill with a gun. He simply explains how being a careful observer of wood ducks allowed him to be a successful hunter of the beautiful birds.

"In several instances I have taken perhaps undue advantage of their movements to shoot them on the wing, by placing myself between their two different spots of resort, and keeping myself concealed."

The quote, as do all others in this article, comes from *The Birds of America*\*, and its author is none other than John James Audubon, the man whose name today titles one of the foremost conservation organizations in the country. April 26, 1985, is the 200th anniversary of Audubon's birth. All nature lovers, hunters and nonhunters alike, should join in celebrating this event.

Although Audubon's present fame derives from the beauty of his lifelike drawings and paintings of wildlife, particularly birds, he was known among his contemporaries as a talented hunter and an accomplished woodsman. That side of the artist, however, is not part of his popular reputation today.

In the early 1800s Audubon took on the staggering task of portraying every species of North American bird. He decided his subjects would be accurately drawn from nature, and this meant he had to first find and then observe them. This challenge absorbed his life. It forced him to endure long separations from his wife and family, and to suffer the failures of two business ventures. Between 1803 and 1843 he traveled over much of the United States and eastern Canada. On foot, on horseback, by riverboat or ocean going vessel, he journeyed as far west as the Dakotas, as far north as Labrador, and

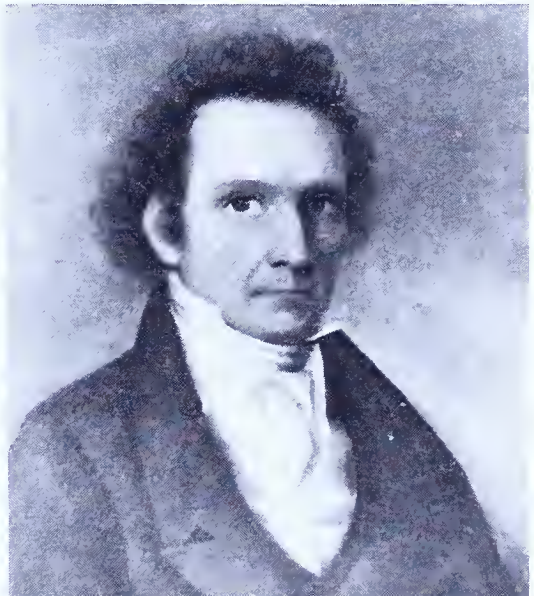
as far south as Key West. Along the way, Audubon relied on his skill with a gun to supply him not only with models for the drawing board, but also with food for the cooking pot.

Audubon loved to hunt. Ample evidence of the artist's devotion to the sport can be found in the gamebird and waterfowl chapters of *The Birds of America*, the manuscript he wrote to accompany his paintings. Volumes five and six in the most modern edition of the work cover the species of greatest interest to today's sportsmen. The accounts contained in these two books make fascinating fireside reading.

In his descriptions Audubon is always quick to voice an opinion on the taste of a particular bird. Of the green winged teal he says:

"I would readily agree with any epicure in saying that when it has fed on wild oats at Green Bay, or on soaked rice in the fields

John James Audubon



AUDUBON spent decades studying birds and mammals in their natural habitat. His paintings, as of the wild turkey, left, and passenger pigeons, have long been in the forefront of wildlife art.



of Georgia and the Carolinas, for a few weeks after its arrival in those countries, it is much superior to the Canvass-back in tenderness, juiciness, and flavour."

Sometimes descriptions of taste come in the form of commonsense tips for fellow hunters. Audubon tried to pass on the knowledge he had learned through trial and error.

"The Snow Goose affords good eating when young and fat; but the old Ganders are tough and stringy."

Hunting during the early 19th century, of course, was much different than it is today. Any bird bigger than a robin was regarded as a potential food source, and the open air markets of large cities were crammed with a wide assortment of birds and other game. It was the era before licenses, regulated seasons, bag limits, and all the other game management techniques that make modern hunting possible. In the young and wild country most birds were at least seasonally abundant. A man could make a living by hunting ducks, geese, doves, and passenger pigeons. In *The Birds of America*, Audubon records this chapter in the history of American hunting through his often detailed descriptions



of sport shooting in many regions.

Discussing the now extinct passenger pigeon, Audubon spends several pages documenting the ruthless manner in which these birds were slaughtered whenever their enormous migrating flocks descended upon roosting areas discovered by hunters. Audubon was not quick to condemn such hunts, however. He concluded that a continuing source of food and protected nesting areas were the keys to the species' survival.

"Persons unacquainted with these birds might naturally conclude that such dreadful havoc would soon put an end to the species. But I have satisfied myself, by long observation, that nothing but the gradual diminution of our forests can accomplish their decrease, as they not unfrequently quadruple their numbers yearly, and always at least double it."

Whether hunting pressure, disease, land development, or a combination of these and other factors doomed the passenger pigeon is still a matter of debate. Audubon's account of the pigeons and



AUDUBON is remembered primarily for his paintings, such as the blue jays and wood ducks reproduced in black and white here, but he was also a fine writer and naturalist—and always a hunter.



their sky-darkening flights manages to give a reader some idea of just how numerous they once were. Ironically, he describes the noise made by a flock of birds that none of us will ever see, with an illustration that is also lost on a modern audience:

"... The noise which they made, though yet distant, reminded me of a hard gale at sea, passing through the rigging of a close-reefed vessel."

Every essay in *The Birds of America* is first rate natural history. In a clear and interesting manner, Audubon relates all he has learned about each species' feeding, migration, breeding, and nesting habits. For the serious student of identification, he also provides a section at the end of each account containing detailed anatomical descriptions. It is Audubon's narrative style, however, that endows his writing with a sense of accuracy that rivals his paintings.

Audubon's account of the wild turkey, for example, is entertaining because

he goes beyond simply listing the behaviors a biologist would observe. He explains that frontier farmers welcomed interbreeding between wild gobblers and their own domestic stock. He describes a lightning-quick encounter he witnessed between a lynx and a wild tom. He mentions a 36-pound turkey he once saw at a market in Louisville, Kentucky. He relates several amusing anecdotes about a wild turkey he raised as a pet. Finally, he offers step by step instructions for constructing and baiting a pen to capture large numbers of these normally wary birds.

Scattered like birdshot throughout Audubon's tales of shooting excesses are examples of responsible hunting behavior. The mallard duck entry reveals the type of hunter Audubon himself regarded as ideal. For a few paragraphs, in an otherwise straightforward account, Audubon paints vivid word pictures which tell the story of a noble Indian stalking a flock of wild ducks. With a crude, muzzleloading weapon, the skilled and patient red man harvests two mallards for his meal, while the larger part of the flock escapes unharmed. The hunter in Audubon's fable does not waste any part of his hard



**COUNTLESS HUNTERS** have been enthralled by the grace and fluidity of the white-tailed deer. Audubon captured these qualities for all to admire.

earned quarry.

"Returning to the wood, he now kindles a fire, the feathers fill the air around; from each wing he takes a quill, to clean the touch-hole of his gun in damp weather; the entrails he saves to bait some trap."

Like the best of modern hunters, Audubon held a deep admiration for his quarry. He loved to observe the stages of life of the birds he hunted. The artist's description of the feeding behavior of a brood of young wood ducks will convince anyone who has hunted

these shy birds that Audubon indeed had a talent for concealing himself and remaining still.

"As they grow up, you now and then see the whole flock run as it were along the surface of the sluggish stream in chase of a dragon-fly, or to pick up a grasshopper or locust that has accidentally dropped upon it."

To locate a complete edition of *The Birds of America*, a visit to a large library may be necessary. The time and effort involved will be well rewarded. To read Audubon's accounts of waterfowl and gamebirds is to gain an enlightening education. On the 200th anniversary of his birth, Audubon's legacy belongs not only to the bird-watcher who stalks warblers for a life list on a bright May morning, but also to the duck hunter who awaits the first flight of the day in the drizzle of a November dawn. Perhaps the greatest tribute we pay Audubon in this modern age is the fact that birdwatching and bird hunting are not mutually exclusive activities. The early riser on both the May and the November mornings might be the same person.

\*Audubon, John James. *The Birds of America*. 1840-1844, Dover Publications, Inc. New York.

## VOLUNTARY WATERFOWL STAMP

Pennsylvania's second annual waterfowl stamp, by James H. Killen, is available in full color from the Game Commission's Harrisburg office, regional field offices, the Pymatuning and Middle Creek Wildlife Management Areas, and selected hunting license issuing agents. Price is \$5.50 delivered, and purchase is strictly voluntary. Income from sales will provide funding for wetlands and habitat and assist in financing wildlife management programs.







# Songsters of the Right-of-Way

by W. C. Bramble, W. R. Byrnes, and M. D. Schuler

“**W**HAT HAPPENS to songbirds living on an electric transmission line right-of-way maintained with herbicides?” That is an important question often asked by concerned birders and conservationists. Although this question has been around for a long time, only in recent years have some answers supported by research been published in the extensive literature on birds. Most recently, a detailed study of birds on a right-of-way (ROW) in central Pennsylvania has supplied some interesting facts particularly applicable to the state.

The primary purpose of this study, carried out in 1982, was to determine the numbers and kinds of birds on an electric transmission ROW maintained with herbicides and in an adjoining oak-hickory forest. An attempt also was made to describe the use of the ROW by various species of birds.

## Condition of the ROW

The ROW selected for this study was originally cleared in the winter of 1951-52 and since then has been kept open by periodic herbicide sprayings. A set of control areas on the same ROW were maintained by handcutting. The herbicides used were 2, 4-D, 2,4,5-T, and AMS (ammonium sulphamate). The first herbicide treatments were applied in 1953, using both broadcast and selective application techniques. The three-mile ROW segment under study was treated four times. Since then the ROW has been kept free of trees by selective applications of 2, 4-D and 2,4,5-T, and by selective handcutting as needed on the control areas.

The plant cover that developed on the ROW was a complex mixture of shrubs, herbs, ferns, and grasses. These plants typically grew in patches after



**THE CATBIRD** was one of the five most common species of birds noted on the herbicide-maintained right-of-way, along with the common yellow-throat, rufous-sided towhee, field sparrow and indigo bunting.

vegetative spread and produced an irregular mosaic pattern of shrubs intermingled with herbaceous openings. Blackberry became dominant over much of the ROW, forming large patches and extensive pure stands. The result was a long strip of shrubland habitat surrounded by a forest edge. In another sense this strip represented a large rectangular forest opening. Although tall growing tree species were periodically removed by herbicide applications and cutting, they continually arose on the ROW from invading seeds and sprouts.

### The Bird Census

Morning bird censuses were conducted twice daily on each area for six consecutive days in July, just before the ROW was re-treated to control resurging trees that otherwise would soon interfere with electric transmission. The

ROW was walked slowly, with frequent stops, along an access road. All birds seen or heard were tallied. Similar censuses were made within the adjoining forest along one side of the ROW.

### Number of Birds Recorded

During the six-day census, 521 birds were counted on the ROW and 269 in the adjoining oak-hickory forest.

The average number of birds counted per acre per day was 2.6 on the ROW maintained by herbicides, 2.2 on the ROW that was handcut, and 1.4 in the adjoining forest. These ROW and forest populations were similar to avian abundances reported as ranging from 1.3 to 2.6 per acre on shrublands in central Pennsylvania, and from 1.0 to 1.9 per acre in oak forests (Probst, J.R. 1976. Unpublished PhD diss., Princeton University). This means the bird population on the ROW was similar to that expected for a natural shrubland habitat of average quality; the forest population also was typical of the oak forest in the region. It is of interest that a significantly higher number of birds were found on the ROW as compared with the adjoining forest. Also, a number of immature birds were found on the ROW (8 percent of the total count), which indicated that the birds were successfully rearing their young in the disturbed habitat.

### Species of Birds on the ROW

Thirty-one species of birds were recorded on the ROW and its forest edges. The fact that fifteen of these species are usually described as "forest inhabiting" is not unexpected because the ROW appears to function as a large forest opening as well as a specific habitat for shrubland species.

The five most common species on the herbicide-maintained ROW in order of abundance were the common yellow-throat, rufous-sided towhee, gray catbird, field sparrow, and indigo bunting. Other common species were black-capped chickadee, chestnut-sided



warbler, American goldfinch, downy woodpecker, American redstart, and American robin. All of these species are typical of shrublands, edges, thickets, and open areas. Together, they made up 87 percent of the total count.

Four other warblers were occasionally seen on the ROW: black-and-white, yellow-winged, Canada and golden-winged. Two of these, the black-and-white warbler and Canada warbler, were not also found in the forest.

### Species in Adjoining Forest

Twenty-seven species of birds were recorded in the adjoining forest. The five most common here in order of abundance were the rufous-sided towhee, red-eyed vireo, common yellowthroat, wood thrush, and ovenbird. The latter two forest species were found only rarely on the ROW. Also common in the forest were the black-capped chickadee, scarlet tanager, downy woodpecker, white-breasted nuthatch, eastern pewee, and American redstart.

### Bird Activities on the ROW

As each bird was counted, its apparent activity at the time also was recorded. Understandably, the most frequent activities were singing and calling (68 percent of the total activities) and fleeing and seeking cover (13 percent). This probably was in response to the presence of the census taker. Other major activities were perching, roosting, foraging for food, and feeding. Nests of common species such as catbird, towhee, and yellowthroat were often found on the ROW.

Occasional use of the ROW by forest birds was of special interest. Eighteen species used both the forest and the ROW for reasons best known to the bird involved. However, a wood thrush ob-



#### Question

May I use an artificially lighted sight on my rifle or bow?

#### Answer

No. The Game Law prohibits the use of any artificial light or battery-powered contrivance or device. However, an artificial light *normally* carried in the hand or on the person may be used for hunting raccoons and furbearers.

served fleeing and seeking cover on the ROW, ovenbirds and red-eyed vireos foraging, and a great crested flycatcher singing were further evidence of the use of the ROW as a forest opening.

### Summary

Through this study we were able to document the presence of an abundant and diverse avian community on the ROW. Bird populations here compared favorably with those typical of natural shrubland and oak forests of Pennsylvania. Evidently, herbicide spraying over a period of thirty years produced a habitat favorable to songbirds.

Cooperators in this project were: Asplundh Tree Expert Company, Pennsylvania Game Commission, Pennsylvania Electric Company (GPU), Pennsylvania State University, and Union Carbide Agricultural Products Company.



IN SPRING, THE PRINCIPAL objective is to locate a male turkey, normally by his gobbling, and encourage him, by means of imitated "hen talk," to approach within easy range of your shotgun.

## Answers to Some Spring Gobbler Problems

By Wayne Bailey

**T**URKEY HUNTING in Pennsylvania, at least fall turkey hunting, is a centuries old tradition, and the state has more turkey hunters than any other. This is written under the assumption that the great bulk, if not all, of readers have had some experience in hunting turkeys and know the basics of gun handling, ballistics, and safety. While fall turkey hunting has been conducted for a long time, Keystone State nimrods in general have less than twenty-five years of spring gobbler hunting experience behind them, and many youthful hunters have much less than that. This is mentioned primarily because spring turkey hunting differs from fall hunting almost as much as potting squirrels differs from an African safari. In fall, you hunt turkeys; in spring, you make a turkey hunt you, although circumstances often demand a diversity of tactics.

Special joys are associated with the spring gobbler season. In addition to the pleasant chorus of birdsong and the blossoming of flowers, a booming gobble lets you know the quarry is present. If he responds to your calls and strategies, you hear him coming closer and closer and your pulse beats wildly when he comes within sight. Steady nerves, true aim, and perfect timing are essential to collecting a trophy.

There are no set rules for hunting turkeys in either fall or spring. These birds are individuals and no one can be certain of predicting their behavior. Their actions may be greatly altered by experience, especially by encounters with hunters. In this article, guidelines, not fixed rules, are presented for hunting turkeys in spring.

Most hunters have had much more experience in hunting deer and other game than in hunting turkeys. Habits



acquired in the hunting of those species, particularly deer, are often counter productive in the hunting of turkey. Deer depend largely on their keen sense of smell to detect enemies. So long as a deer hunter is motionless and the wind is in his favor, an oncoming deer may approach within a few feet of him. Not so with turkeys which lack a sense of smell and depend largely upon their wonderful eyesight for survival. A turkey appearing more than 50-75 yards from a hunter is almost certain to determine his presence before approaching within shotgun range, particularly if the hunter has been calling. In addition to its visual powers, the bird has excellent hearing and near perfect ability to pinpoint the source of a sound. Hunters that fail to take these factors into consideration severely handicap themselves in the hunting of turkeys.

In my opinion, rifles should be discouraged in the hunting of turkeys, especially in the heavily forested areas in the eastern half of the country. Accidents involving a rifle are far more likely to be fatal than those occurring with a shotgun. I personally know at least fifteen persons who were shot with shotguns while turkey hunting; one was killed. I know five who were shot with rifles; three were killed. Hunting turkeys with a rifle reduces the importance of calling, positioning, etc., factors which in my opinion represent the essence of turkey hunting and elevate the sport to the status of an art.

In spring, the principal objective is to locate a male turkey, normally by his gobbling, and encourage him, by means of imitated "hen talk," to approach within *easy* range of your shotgun or bow. Locating one is easier in an area with which you are familiar or which you have thoroughly scouted than it is in a strange region. The best "locating job" is hearing a gobbler in the evening at roosting time when it is legal to hunt the following morning. You know where he is and before dawn you can be at a suitable place from which to talk to him. A "suitable place" is one as close

to the tom as possible, 100 yards or less, which you can reach without him knowing it, and *so situated that the bird cannot be seen as it approaches until it is within good killing range*. If this is done, the bird does not have time to identify you and escape before you aim and fire. The chance of a crippling loss is then greatly reduced. Preferably, one's back should be against a large tree or rock, with a barrier (thick ground cover, stream, steep slope, etc.) in the immediate background. This reduces the possibility of the gobbler approaching from behind or another hunter shooting you from behind.

### Open Woods a Problem

Finding a good place from which to call can be a problem over large areas in the northcentral and northwestern parts of the state where open forest understories and smooth topography permit vision to considerable distances, sometimes beyond 100 yards.

Gobblers, heavy-bodied and with relatively short wings, do not fly as well as hens and smaller birds. They feel more secure on high ground because it enables quicker and easier takeoff. Hence, whenever possible, one should position himself on ground higher than the turkey or on the same level it is on.

You have found a good position. What do you do now? The first calls made by turkeys when they awaken at dawn's earliest beginning are "tree" calls, quiet clucks and soft yelps that cannot be heard by humans more than 35-50 yards. These are 2-4 notes and are best imitated on a well-tuned box call, snuff can, or diaphragm. (This call and all others mentioned are best learned from any of several marketed tapes and records.) This is the only call that should be used before the gobbler leaves the roost. When louder calls, yelps, cackles, etc., are used near the roost, the tom, if cagey, is reluctant to fly down until he sees the supposed hen. After he sees her he knows it is safe to fly down. If she doesn't soon come into view, his suspicion is aroused.

After the gobbler flies down (you

usually know this because his gobble sounds farther away), louder clucks and yelps may be used. If he has been gobbling vigorously and suddenly everything is quiet, you should be prepared to shoot. Your legs are flexed; the gun is resting on your knees and pointed toward the expected point of approach; the safety is off; your cheek is pressed against the stock; there is no movement. Three items should now be mentally reviewed. You must be certain that: (1) the first movement observed is *not* that of a person (a human walking in leaves sounds much like a turkey); (2) the bird is a male (normally bearded, and almost always with a nearly naked, *white-topped* head, and often *strutting*; and (3) it is close enough to receive no less than 8-10 pellets in the head and neck area.

A conscientious hunter never forgets that he is *not* hunting a big, armored, 15-20 pound muscular body, but a snake-like, foot-long neck topped by a peanut-size brain, either of which must be struck before a trophy is likely to be claimed.

**THE MALE turkey is normally bearded, almost always with a nearly naked, white-topped head. The best target is the head and neck area.**



When you have been talking with a gobbler and have heard only gobbling, why is it necessary to be certain the approaching bird is a male? When the tom is accompanied by a hen, his tendency is to follow her. She might be *silently* responding to your calling and be the first bird you see. You are in a state of high excitement and are psyched up on *gobbler*. If you don't watch what you are doing, you may shoot a hen, be subject to penalty, and have an unpleasant, guilt-ridden, rather than rewarding, hunting experience.

### One Never Knows

One never knows what a tom is going to do upon leaving the roost. As a rule, if he has a hen with him he isn't going to pay much attention to you, even if you are an expert caller. If you can scare the hen out of the area, the tom will be more receptive to your calling. Even if you also spook him, he won't go far, and may heed your calling later in another setting. Don't give up on him before time to quit.

Many spring hunters complain about hung-up toms, birds that stay out of sight, gobbling repeatedly, perhaps all morning. Much has been written about how to hunt them. The following are the more common causes of hung-up behavior:

1. The tom was accompanied by one or more hens.
2. There was a barrier (creek, thicket, road, etc.) between hunter and bird.
3. The hunter was a poor caller or used the wrong calls.
4. The tom has had some bad experiences with hunters and is gunshy.
5. The hunter has mildly spooked the turkey.

The following are some tricks that may enable one to deal with a reluctant gobbler:

1. Play a game of mobility. Call from different angles, preferably 180° from your last position. Move straight away from him, 100 yards or more, and call, a move completely beyond his realm of comprehension.
2. Cease calling and wait, wait, wait.



He may eventually check you out.

3. Use a variety of calls. Sometimes a bird will respond to one after ignoring all others.

4. Use the mating cackle of the hen. Properly rendered, few toms can resist it. It's a real come-on in turkey language.

5. A well-imitated gobble will sometimes arouse his jealousy, particularly if you are dealing with the area's dominant bird, and cause him to approach rapidly, spoiling for a fight. However, a gobble will often cause a subdominant bird to leave the area. Use of the gobble may enable you to bag a trophy bird.

A hung-up gobbler will sometimes establish a travel lane, walking back and forth from point A to point B, possibly 100 or more yards apart. When this pattern becomes evident, the bird may sometimes be killed by waiting for him to gobble at a given point, then walking rapidly and quietly to that point and waiting for him to return.

Birds that gobble after sunup are likely more sex-starved, therefore more vulnerable, than those that gobble little and only at dawn. Hence, persistence and dedication throughout the morning are important to success.

If you didn't roost a bird or hear one at dawn, and know you are in turkey territory, your best bet for success is to locate a turkey by making him gobble. On occasion nearly any kind of turkey note — cluck, cutt, yelp, gobble, or, particularly, the mating cackle of the hen, will stimulate a tom to gobble. Males will sometimes respond to owl and crow calls, police whistles, or any sudden, loud noise when they won't respond to turkey talk. On some days they won't gobble at anything. No one has yet been able to predict when such days will arrive.

With the possible exception of unusually cold, windy days, there may be little relation between the weather and gobbling activity. Cloudy, cool days, even with light rain or drizzle, are often productive. Gobbling may occur with several inches of snow on the ground.



**ONE NEVER KNOWS** what a tom is going to do upon leaving the roost. As a rule, if he has a hen with him he isn't going to pay much attention to you, even if you are an expert caller.

While most hunters are eager to be afield on opening day or during the first week of the spring hunting season, success is more likely (weather factors being equal) during the latter part of the season. Gobblers are more likely to be accompanied by hens during the early part of the season; thus, there is less gobbling and toms are less responsive to imitated calls. During the latter part of the season most hens that are going to nest are already sitting. They no longer seek the company of males who are now feeling lonely and sexually deprived. Fewer gobblers are present than earlier, but the survivors more readily respond to the calling efforts of hunters.

In hunting turkeys the bird's head and neck are the target. Only shotguns shooting tight patterns should be used. Most knowledgeable hunters use buffered, copper-plated, magnum loads of 5s or 6s, though some use both larger and smaller shot. Any gun should be test-fired repeatedly until its capabilities and limitations are precisely known. To shoot at the magnificent wild turkey when it is beyond good killing range is

negligence bordering upon felony.

One should not shoot at the rear end of a turkey. No vital organ is in that area and, while the bird may be killed, it is unlikely to be possessed and used. Similarly, one should not fire at a bird in full strut. Its neck then presents a smaller target and both head and neck are partly protected by feathers and breast fat. Shoot only when the neck is fully extended, even if it is necessary to say, "Good morning" or "Goodbye" to the bird in order to get it to extend its neck.

When the bird goes down, don't chance losing it by standing there congratulating yourself. Race to him and stand on his neck until he quits flopping. Be careful of his spurs if you pick him up by his feet. Above all, don't pick him up by his feet while he is still flopping.

If you were to ask the hundred best turkey hunters in the country about their calling and hunting techniques, you would likely find no two hunting and calling exactly alike. Turkey hunting involves several scientific principles but is basically an art. Whether art or

science, the more you learn about it, the more unanswered questions arise. In order to be consistently successful, one must learn turkey language, be truly interested and dedicated, have good eyes and ears and interpretive power, and be adaptable and willing to experiment.

Primitive man, aware of his dependence upon the animals he slew, worshipped them outright or made them a part of his religion. A good turkey hunter is conscientious, obeys the game laws, is aware of the fragility of our environment and the game pursued. He will not do anything to endanger game resources. Finally, he applies the golden rule in his relationships with landowners and fellow hunters.

Wayne Bailey has long been acknowledged as one of the country's top wild turkey hunters. Besides numerous magazine articles, he is author of the informative book, *50 Years Hunting Wild Turkeys*, available from Northwoods Publications, Box 5196, Harrisburg, Pa. 17110; \$7.95 delivered.

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Deer and Deer Hunting: the Serious Hunter's Guide**, by Robert Wegner, Stackpole Books, Cameron and Kelker Streets, Harrisburg, PA 17105, 316 pp., \$24.95. Wegner, editor of "Deer and Deer Hunting" magazine, opens with biographical sketches of half a dozen near-legendary deer hunters, including Fred Bear, Francis Sell and Leonard Lee Rue III. He then goes into the natural history of deer; deer hunting lore and mystique; deer hunters in general, including thoughts of ethics and the future of deer hunting in America, and closes with a 400-entry annotated bibliography, 1838-1984, on—you guessed it—deer and deer hunting. An unusual and highly readable book.

**Hunting Ducks and Geese**, by Steve Smith, Stackpole Books, P.O. Box 1831, Harrisburg, Pa., 17105, 160 pp., \$17.35. Smith has slogged the marshes, lugged the decoys, spent the days (years) in the blinds, and in so doing learned a lot about hunting our waterfowl. Such as the observation that where steel shot is required (which is most everywhere on these species), the best choke is modified, not full. Full is needed only for shots beyond 40 yards, but the laws of physics greatly reduce the effectiveness of steel shot at such ranges; thus it makes more sense to keep shots under 40 yards, use a modified choke and profit from its larger pattern. A lot of other good firsthand tips too.



# MR. WOODCHUCK, MY FRIEND

By George H. Block

“THEY REMIND me of an alligator in a jungle pond with just his eyes showing above the water,” I murmured to Dave. My friend and I were watching a brown spot in the alfalfa field on the far hillside. The brown was the dirt mound of the little excavator we’d been waiting a half-hour for.

Over the years, many of my more pleasurable hours have been spent in a like atmosphere, watching similar brown spots in hopes of a shot at Mr. Groundhog. My alligator comparison was a reference to a woodchuck’s habit of just poking the top of his head out and surveying the countryside before venturing into the open. The chuck’s eyes are close to the top of his head, and many’s the time the shooter is being watched as he sits there jabbering away, totally unaware he is being studied. Little furry alligators, that’s what they are.

While every regular reader of this magazine knows of my love affair with the whitetail, I could truthfully say I’m not totally faithful to my first love. I’m just a little promiscuous. I also love groundhogs. The deer is an easy love, much like the lissome little blond cheerleader of high school days. Graceful of figure with everything placed right and of the proper proportion. Even the whitetail’s movements are graceful enough to turn anyone’s head. Artists paint both, for even in photos or on canvas the whitetail and the pert blond are pleasing to the eye. The groundhog, on the other hand, has no such grace as he waddles across the hillside. He has no waistline and his bellybutton often drags the earth. His tail is not the graceful white flag of the deer, but a hairy rope that flashes signals in the air only when he’s hurt. While the deer



wears a spotlessly clean coat, a cloud of dust sometimes floats skyward from a chuck when it is shot.

One thing the groundhog has though is character. He eats nothing but the best while acquiring that aforementioned waistline. While the deer feeds on the twigs and mast of trees, the chuck turns his nose up at such table fare, and stays among the succulent alfalfa and clover. When such food is done, he just hibernates rather than take second best. Much like the backwoodsman admired for his individuality, he just says, “Leave me alone,” for a loner he is. In fact, he doesn’t get along well even with his own kind. While a mother tolerates her young until they are weaned and an enamored male may chase the girl of his dreams in late winter, during the rest of the year another chuck better not tread too near his hole. I’ve watched them fight many times, and have seen many a

woodchuck with scars from fighting. Such fights often last two or three minutes, and the last one I saw ended with the dominant chuck chasing the lesser in circles for at least ten minutes.

Tremendously strong for a 10-pound animal, a chuck can excavate a tunnel in no time flat. A big chuck will start a hole and in about two minutes dig deep enough to cover his body, and that's in hard summer soil. Try it sometime using your fingers. I never think of woodchuck teeth without remembering an uncle in Ohio who had several scars on his hand. He picked up a "dead" groundhog to clean for supper, only to find Mr. Groundhog didn't take to the idea of being the main dish. They are a rodent, and with typical rodent teeth this one bit right through his hand. I don't know what became of that chuck, but I'll bet my uncle forgot about eating groundhog for a while.

A couple of years ago, a deranged woodchuck threatened me while I lay watching for bear. Belly down on the ground with my chin resting on my hand, I was at peace with the world when around the corner of an old building chugged a furious chuck, teeth clacking as he skidded to a stop inches from my nose. Whoops. I retreated to safer ground, thinking discretion the better part of valor. Those teeth looked big as barrel staves. Being eaten by a

lion may be a noble death for a big game hunter, but I'm not sure I want my obit to say, "Here lies old G.H.B., III, killed by an amorous woodchuck." Tough, they are. In fact, while I believe most deer hunters tend to be over-gunned, a mythical 100-pound groundhog would require at least a 375 H&H to hunt. Thank goodness they're small.

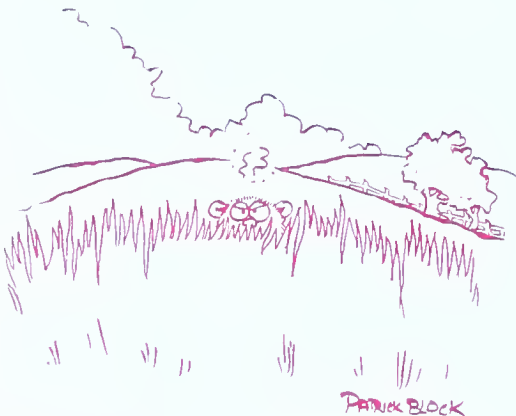
### Denny Dimwit

These rascals come in a variety of personalities. While most are wary and ever on vigil, there is always Denny Dimwit. Last September, well into the season, I completely circled a woodchuck while I was totally without cover. He was in the field and I walked within 100 yards of him. I just couldn't find an angle for a safe shot. I kept moving and trying, while he just stood there on his mound watching me. He was out when I got there and he was still out when I left, despite the fact I killed a few of his neighbors which offered safe shots. I regret not having the opportunity to take him, for I'm sure he has since sired numerous dimwitted young ones that will weaken the species. On the other hand, maybe he was smarter than the others. I'll have to admit there was one angle I could have had a decent shot, but after watching him for fifteen minutes, I felt sorry for him and told myself the shot was too easy, not offering the challenge I wanted.

Another woodchuck is the Olympic Runner. He lives in an open field bordering standing corn or some other such cover. Up comes the top of his head and he eyes you like an alligator for ten minutes or so. Now an inch of head doesn't offer much target at 300 yards, so you wait for him to show a little more body. Suddenly he leaps out of the hole and streaks for the corn, never pausing to allow a shot. On his return trip he repeats the process. Of course, he takes that one last look from the safety of his den. Oh, how I hate him! He never stands still in the open. Groundhogs aren't supposed to think they're Jesse Owens.

Every chuck hunter has run across

**"THEY REMIND ME of an alligator in a jungle pond with just his eyes showing above the water. . . ."**





old Jack-in-the Box. While any sensible hog should stay up for two or three minutes, surveying his kingdom, this one's ups and downs are timed in seconds. Just as you're ready to shoot, down he goes. If the grass is a little high, shooting is not only frustrating, but darn near impossible. Finally, after four neck wrenching attempts to shoot while he's standing, you decide to shoot while he's down — only to find it nearly as difficult, for he stays in neither position long enough. Updownupdownupdown. Ten minutes of trying to get the reticle on him and you know you're going to shoot. You also know you're going to miss.

I was hunting Green County with Dave Garrison when we had a Jack-in-the-Box performing for us. Dave snuggled into position and got settled, while Mr. Chuck stood there, making a beautiful 400-yard target. Just as the rifle cracked, down he went. A hit? No, he was just ducking the bullet. Up he came and again Dave shot just as he dropped down. The procedure was repeated five times and I broke up laughing. That's the only animal I've ever seen that could see a 25-06 bullet traveling at 3500 fps coming and dodge it. Dave didn't think it was funny then, and no doubt will not think it any funnier after I put it in print. Oh, well, being choked by a friend might make

a better obit than being killed by a chuck.

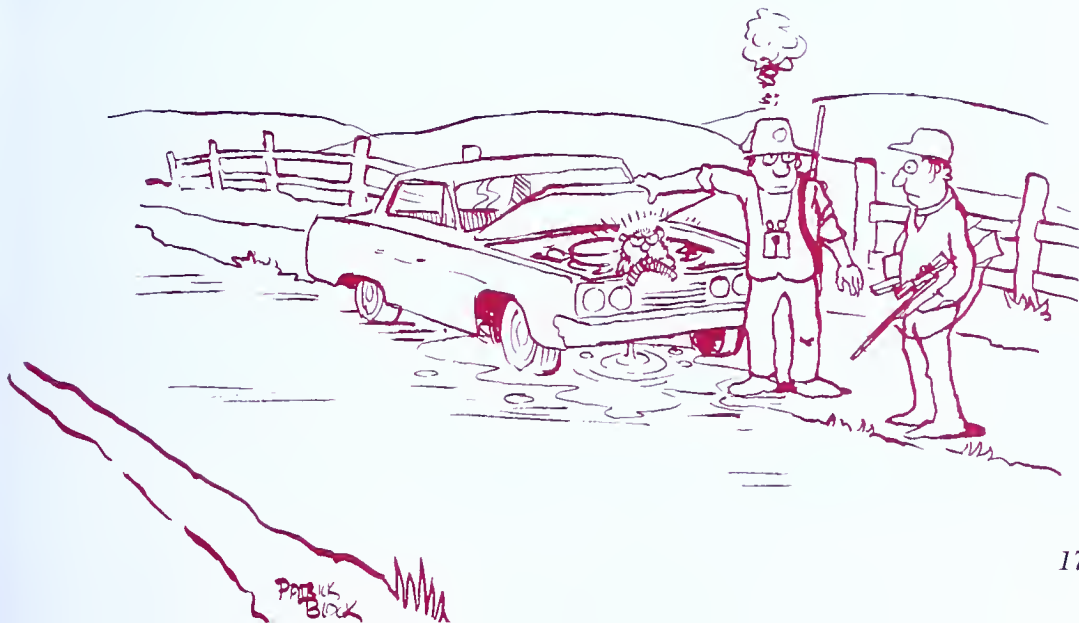
The dude in the safari jacket is supposed to stand his ground when the lion charges, a yellow streak covering 100 yards in about three seconds. Jaws open and lips pulled back to expose teeth that will rip the man to shreds if he makes a poor shot. White, O'Conner, Capstick and others have described the scene many times, leaving us open-mouthed with imagination working overtime. It's the hunter's moment of truth, the time when he faces sure death if his nerves go and his eye and trigger finger are not steady. I've faced such moments in an alfalfa field in Washington County.

### Almost Undone

Hunting with a greenhorn and another experienced rifleman early one summer almost proved my undoing. The first-time hunter carried his trusty Model 70 257 Roberts, and my friend and I were toting lightweight 243s. As is my custom, my rifle was unloaded, for the novice was to have the first shot.

A few yards into a field a chuck was spotted. It was totally oblivious of our presence. We figured he was about 70 yards away. Now, chuck hunting is supposed to be sporting, and anything less than 200 yards we usually try offhand. This had been explained to the shooter

**THE PUDDLE OF ANTIFREEZE was my friends' clue that something was wrong under the hood of their car. . . .**



beforehand, so he raised his Winchester and touched one off. Dirt flew beside the chuck and his reaction was immediate. Instead of disappearing down the nearby hole, he started to run right at us. Again the 257 cracked, but still he came. The shooting continued until the groundhog got within 20 yards, and three would-be big game hunters took off. When we reached the road, puffing, we stopped and looked back. There was our attacker, standing on his rear end, still glaring at three cowards who had failed their moment of truth. I've often wondered if the next time the hunter should have a back-up shooter with a loaded rifle. That's the only reason I ran, of course—my gun was empty.

### The Hardest Shot

The hardest woodchuck to shoot is the Sentinel. He crawls up on a fencepost and sits there like a chubby wingless vulture. It appears to be an easy shot, even at over 400 yards. The rifleman gets into a steady position and squeezes one off. The dirt flies, perhaps 300 yards beyond the chuck, and the shooter asks, "Where did I hit?" The answer is easy. Either over, under or alongside him. Who can tell in that situation? Of course, the animal stays on his perch and the frustrated shooter keeps trying until he runs out of ammunition.

Woodchucks can be trouble, like the one that decimated my mother's garden last year. She finally chased him with her broom, beating at him as he made a hasty retreat to his den. My mother hates groundhogs.

But her problem was minor compared to that of a couple of friends who went to McKean County on a turkey hunting trip. They parked well off the road and made their way into the woods for an enjoyable day of hunting. Whether they got a bird or not is immaterial, for upon their return they noticed a puddle of antifreeze under

their car. When they raised the hood to check it out, there sat a sassy woodchuck, chewing the core out of the radiator. Apparently the salt on the cooling system made an enjoyable snack and the lead just added crunch. Months later, my friends could laugh about it, but their comments at the time were anything but printable.

Many people find woodchucks troublesome. The farmer whose corn has been decimated by these eating machines many times places the blame on deer. Any outdoorsman knows that deer only eat the ear, but the chuck destroys the plant to get at the ear. Multitudes of tractors have been damaged as they ran over extensive den areas, only to have the ground collapse beneath their weight. The little critters do like to make tunnels. Cows and men have been injured when they accidentally stepped into holes. A farmer friend who restores old Jaguars has trouble with groundhogs thinking antique cars are edible, and we've all seen outbuildings on the verge of collapse from groundhog burrowing.

However, they also do some good. Their burrows provide homes for other critters, not the least of which is the rabbit. They are edible, despite what some think. (After all, they only eat the best.) The hair on the end of their tails makes a great salmon fly, and the hours of enjoyment seeking them is priceless. As I watch a distant woodchuck, I think of good times. Lazy summer days lying in the sun with a friend, searching a faraway field with binoculars and trying to convince him that I can hit anything I can see. I think of accurate rifles, good scopes, precise ammunition. But most of all I think of old friends. Dave George, Don Spang, Ed Haley, Jack and George Daniels, Dave Garrison, and last but not least Gene Harmon. They are all chuck hunters and good ones. More importantly, they are good friends. And hats off to Mr. Groundhog, for he has made them so.



# SIZING UP TRAPS

By Joe Kosack

**T**RAPS and the sets in which you use them are two of a trapper's greatest assets. Sure, it helps to study the habits of the furbearers you intend to pursue, but if you don't use the proper size trap and a set capable of capturing the critter, you might as well hang the traps in the garage.

Traps are the tools of the trapper. Each type is designed to capture and hold a specific furbearer. Some traps are made to kill the animal, while others are made to merely hold it.

Two types of traps are legal in Pennsylvania—the leghold trap and the body-gripping trap. Each is used for a specific purpose and both are used extensively in this state.

The leghold trap is available in a variety of sizes and shapes. The selection includes jump, long-spring, coil-spring, stop-loss and double-jaw traps. Each type has a specific purpose or feature and comes in a variety of sizes so the trapper can match the proper trap with each particular trapping situation.

With such a variety available, many novice trappers buy the wrong type or size for the animal they intend to catch. Thus we have situations where animals, target and non-target, may sustain unnecessary leg damage.

## Big Paws . . . Small Feet

Many kinds of furbearers are pursued by Pennsylvania's trappers. Some have big paws; others have small feet. Some forage near or in the water; others hunt rocky mountain ridges. Let's take a look at several of Pennsylvania's furbearers and discuss the proper trap sizes for each.

The muskrat is the most sought after furbearer in the state. When caught in a trap, a muskrat's initial reaction is to head for safety in the water. Unfortunately, many trappers cut him short of

the water, leaving him on the land where he tosses and turns until he snaps the fragile bones in his caught leg. Some people mistakenly believe a muskrat chews his way to freedom when caught in a leghold.

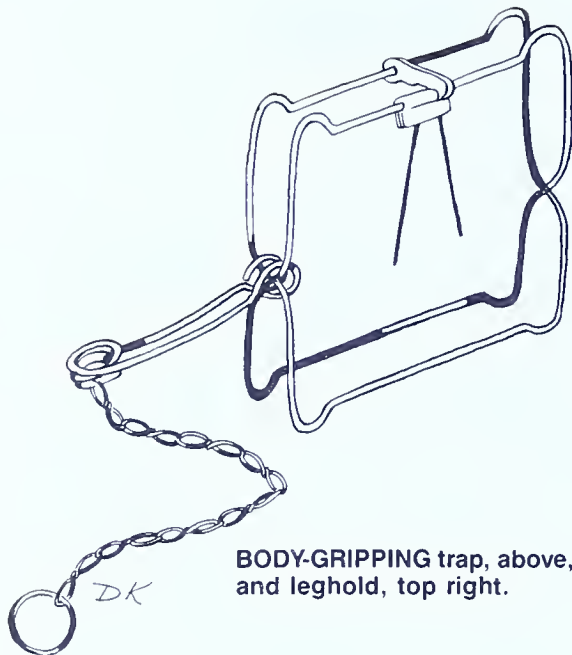
When trapping 'rats, always give them enough chain to make it in to the water—they'll drown themselves in two or three minutes in most instances. Use any type of trap in the No. 1 or 1½ series for muskrats. Anything bigger is a waste of trap and money.

Body-gripping traps are also popular with muskrat trappers. I like to use the single-spring, 4 x 4-inch traps. But if you're trapping in an area which mink frequent, consider the double-spring conibears in the 4 x 4-inch size.

If you must make sets for muskrats on land, the stop-loss and sure-hold

**MINK ARE USUALLY** easy to keep in the trap if, as with the muskrat, you give them enough chain to reach deep water and drown.





**BODY-GRIPPING trap, above, and leghold, top right.**



traps will get the job done. These traps incorporate a hold-down spring that flops down on the muskrat, holding it tightly against the trap. This spring limits the muskrat's movement once it's captured. These traps are also ideal in shallow water areas where you can't design a set to drown the catch.

Mink are usually easy to keep in the trap if, as with the muskrat, you give them enough chain to reach deep water and drown. These elongated creatures will twist, turn and chew the night away otherwise. Trap sizes should be in the No. 1 or 1½ coil spring series for specific mink trapping. The double-spring No. 11 is also a fine choice.

### Double-Spring Conibears

Although mink can be caught in the single-spring, body-gripping traps, for specific mink trapping, it would be a safer bet to use double-spring conibears. As mentioned, the mink is a beehive of activity when caught, so extra holding power is recommended, especially when there's a large buck running the creek.

Raccoons are relatively easy animals to catch in traps. The problem is holding them, as they are very powerful. When trapping raccoons a strong trap

is needed — not necessarily a big trap, just a strong one.

Raccoons are noted for escaping leg-hold traps, especially those set by a novice. Why? Because beginners give these powerful animals the opportunity to grab onto a rock or a root, allowing the critter to pull his paw out of the trap. Before you place your trap in the dirt, make sure there's nothing nearby that he can use as an anchor point to pull from.

There are two trap sizes for raccoons that most trappers find acceptable, the No. 1 and 1½ coil-spring traps. A raccoon can't poke his face under the jaws of those traps and chew on the numbed portion of his limb.

Some raccoon trappers still use the No. 2 coil-spring, but these guys are only reducing the potential of their trapline. These traps are too big for raccoons and invite them to escape. They give the raccoon the chance to chew on its trapped limb. This chewing is common only in yearling coons, but it doesn't make sense to risk losing an animal once it's been caught.

Young raccoons are compulsive chewers when caught. They fight the trap and the immediate area, chewing on whatever they can sink their teeth into. Mature raccoons, on the other hand, usually raise a ruckus for a while and then settle down. It's common to walk up on an older raccoon in a trap and find him sleeping or lounging.

The selection of proper fox traps is especially critical. Not only does the trapper have to worry about catching and holding the target animal, but he



must also consider the effects his chosen trap will have on nontarget animals, particularly dogs and cats. I believe the No. 1½ and the 1.75 coil-spring traps give the best results.

Some fox trappers still use No. 2 coil-spring traps. These hold foxes well and in years past were considered the ultimate fox trap. It's time to retire this trap from farmland areas. The No. 2 generates more problems than it's worth. In addition, the smaller traps are less expensive. So why waste money on equipment that promises to give you headaches?

Foxes are equipped with clubbed feet, so they're easy to hold in traps, providing you catch more than a toenail. It's also worthwhile to buy fox traps on which you can set the pan tension. Traps with pan tension screws can be set to fire only when two or more pounds of pressure are applied to the pan. Thus the trap will remain set when smaller animals, such as rabbits and chipmunks, step on the pan.

I, like many other fox trappers, use a short chain and stake my fox traps. The short chain (four to six chain links) keeps the fox from making long running lunges that will either damage the fox's trapped paw or allow him to pull free. This modification increases the trapper's odds and saves wear and tear on the animal. I strongly believe that less pain means less struggle from the animal in the trap.

In the whiffy business of skunk trapping, most trappers will find the No. 1 double jaw trap a superior choice. Although I doubt that many trappers specifically target their efforts for skunks, we'll dwell on the subject for a moment.

Trapped skunks, like yearling raccoons, are compulsive chewers. The double-jaw traps offer some extra holding power by incorporating two sets of jaws, one atop the other, in its design. This trap has been on the market since the days when skunks were one of the most sought after animals in the coun-

try. So if you want to "hold that skunk," double-jaw traps are a fine choice. They're sure to give you smelly results!

Opossums are another one of those unmentionables that visit the traplines of young and old alike. Still, schoolboy trappers find plenty of adventure stalking the ol' grinner.

The opossum isn't a tough animal to hold in a trap, but as with other furbearers, you've got to use the proper size trap if you intend to reap the rewards of your early morning efforts. I would recommend the No. 1 or 1½ coil-spring traps for opossum. Why? In possum trapping you never know what you'll catch in your set, even though you've dubbed it "just a possum set." Raccoons, foxes and mink have all been taken in opossum sets, so use a trap that will promise results even when the unexpected strolls into your set.

### Three Types of Traps

For beaver trapping, three types of traps are basically used. In the leghold variety, most trappers prefer the No. 3 or 4 series traps. In conibears, most trappers choose the 10 x 10-inch trap. Beavers are aggressive when caught, regardless of the type of trap used, so it's wise to use strong models and fasten them properly in deep water. Some people say the No. 2 coil-spring will work well on beaver if you can catch them by the front paw. However, I don't like to take chances. If you miss a flat-tail once it will be a whole lot wiser the next time it approaches one of your sets.

Swivels are a valuable addition to the chain of any trap. They reduce self-inflicted damage when the animal turns in the trap. Place the swivel on the chain six inches from the trap.

This article should clear up some of the problems associated with choosing the proper size traps for the furbearers you intend to trap. It's essential that all trappers who participate in the fall harvest choose the proper tools for the task at hand.

# **Input From Field Officers**

## **Stereotyping . . .**

**W**HENEVER the topic of deer management arises, there are certain misconceptions on the part of the public. Many folks envision the game manager as a fellow dressed in a shirt and tie, sitting in an air conditioned chrome-plated lab with his feet propped up, studying graphs, charts, and computer printouts. In their minds the biologist rarely gets into the field, and if he does, it is only to peer over the top of his glasses and mutter something about carrying capacity or deer density.

Quite often as the discussion continues, a sportsman will refer to our annual elk survey and recommend that Pennsylvania's wildlife biologists should also count deer from a helicopter. Others mention the black bear research program and suggest we ear-tag deer in a similar fashion to estimate their populations. It is easy to explain that a method which will work with one species of wildlife might fail completely if used on another because of differences in behavior, habitat, and the number of animals involved. For example, elk inhabit only a 100-square mile area, and in our January censuses we try to locate every one. In the 1984 survey we counted 119. The effort and cost put fourth on this project is tremendous. Some of us work exclusively on it for nearly two weeks. It would be physically and logistically impossible to accomplish such a total count on a statewide basis with the white-tailed deer. We can also argue against

a marked recapture method of censusing deer by explaining that we don't have a convenient and safe capture method such as the foot snare or culvert trap used for bear. Also, such a technique would mean that thousands of deer would have to be caught, and we really don't have the personnel to handle such a job.

Both explanations are scientifically valid. I think, however, that what the average sportsman really wants to know is what field work the Game Commission is doing with the deer. District game protectors and deputies have been conducting field research on deer for years, some of it right under the hunter's nose. The sportsman just hasn't realized this because he has stereotyped the conservation officer, like the biologist, as a person with a flat-brimmed hat whom he may see once a year checking hunting licenses or game bags. Most people aren't aware that it is the officers in the field who collect much of the data the wildlife manager feeds into his computer.

## **Reporting Rates . . .**

Every hunter who has ever had his deer checked by a field officer has been a part of the reporting process. Everyone knows that successful deer hunters are required to send in a report card. It is also no secret that not everyone complies with this regulation. People forget, cards are lost, and some don't care. In Cameron County, for example,

**By Joe Carlos**

**DGP, Cameron County**





## **Please Note . . .**

**If you have any reason to contact us about your subscription, be certain to accurately list your Account Number (the top line of letters and numbers on the mailing label affixed to the back cover of your magazine). This will provide us with immediate access to the computer's data banks and will help us resolve your problem quickly.**

only about 66 percent of the successful buck hunters send in their cards, and only 56 percent of the doe harvest is reported. How do we know that? During the season, game protectors and deputies examine every harvested deer they possibly can and fill out a form for each. Because these officers have the law enforcement image, most sportsmen feel this is just a check for hunting tagging violations. These examinations are really a form of data collection, and all this information is fed into a computer. After the season, when all the mailed report cards have been received, information from them is also placed in the computer. A cross check is then made between these two sources of harvest information to determine what percentage of successful hunters report their kills. In the 1983 season, for example, 136,293 hunters sent in report cards. When we take into consideration the statewide reporting rates (an average of 56 percent for bucks and 52 percent for antlerless deer), we find an actual deer harvest of 242,454 animals. Quite a difference. Imagine the errors that would result if management decisions were based only on the reported kill.

## **Reproductive Data . . .**

After the hunting season, field officers gather another form of data and, because we're not as highly visible, most people aren't even aware we're doing it. Another bit of information biologists need to begin planning for the next

hunting season is the reproductive rate. During winter and spring we examine every possible doe that is killed on the road or pulled down by dogs. From these we determine and record the number and sex of the embryos they were carrying. We also remove half of the lower jaw so the biologists can correlate the age of the deer with this information. This helps the game manager project how many fawns will be born and how many deer will be available for the next hunting season.

## **Tightened Belts . . .**

It is interesting to note the difference in reproductive rates from one part of the state to another. In three years of examining pregnant does here in Cameron County, I have found only one set of twins. However, I served as a deputy for nine years in Clarion County, and twins were the rule there. Occasionally we would find a set of triplets.

The reproductive rate is a reflection of the quality and quantity of available food. We are now seeing the effects of the overbrowsing and overpopulation of past years in many traditional deer hunting counties of northcentral Pennsylvania. Tightened belts and a change in attitudes may be necessary to repair these damages and ensure suitable habitat for future generations.

Incidentally, since the Game Commission changed its policy a few years ago to allow the public to pick up and retain roadkilled deer, it has become increasingly difficult for many of us to obtain this reproductive data. Many motorists remove and discard the entrails, throwing away the information we need. If you pick up a roadkilled female deer between the first of February and the first of June, give your local Game Commission officer a call prior to dressing out the animal so he can give you specific instruction in this regard.

## **Survival . . .**

In trying to predict fall hunting



populations we must know not only the number of fawns born but also the percentages of both juveniles and adults which will survive from the close of one hunting season until the beginning of the next. Again, game protectors' reports of mortality caused by dogs, highway kills, poaching, crop damage kills, and occasionally starvation yield this data. Using the proper allocation of antlerless deer licenses as a tool, the Game Commission has been able to balance the size of the deer herd with the natural food supply. This has cut starvation losses substantially in recent years.

There will occasionally be losses that can't be predicted, though—as in the winter of 1981–82, when thousands of deer slid to their deaths because the steep mountain slopes of northcentral Pennsylvania became coated with ice. Game protectors' estimates of those losses resulted in a cut in the antlerless license allocations the following hunting season to allow populations to build back up.

**THE ROLE of today's conservation officer as a gatherer of wildlife data has changed from a gut feeling to a refined science.**



## You've got a friend in Pennsylvania

It is interesting to note how survival rates vary among different parts of the state. For instance, in Cameron County approximately 86 percent of the deer which survive one hunting season are still alive the next fall. In parts of the state where traffic is heavier, survival rates are somewhat lower. Only 75 percent of the deer in Schuylkill County, for example, survive from the end of one hunting season to the beginning of the next. Areas with extensive highway systems, especially interstates, are particularly bad.

### Changing Times . . .

At one time the game warden left his cabin on horseback at dawn, rode out over his district, killed a rabbit at noon, roasted it over an open fire, and returned at dusk with all the knowledge in his head deemed necessary to set seasons and bag limits. As you can see from the foregoing discussion, times have changed. The role of today's conservation officer as a gatherer of data for wildlife management has changed from an intuitive gut feeling to a refined science. Thousands of deer are examined by Game Commission employees every year. With field personnel contributing the raw data, game managers can make the proper decisions on facets such as allocations of antlerless deer licenses. The success of this system is proven by the results. For example, 1983 (the latest season for which information is available) marked the fourth straight year that hunters reported harvesting over 70,000 bucks. And even with monsoon rains on the opening days of both antlered and antlerless deer seasons that year, the total deer harvest was the ninth largest in history.





**N**O MATTER what the time of year, to a hunter it is always October in the soul. Even now, looking out at the bleak late-winter landscape, I see in my mind's eye the bright colors of fall and feel the promise of the next small game season, still so many months away.

I take out my Savage 20-gauge over-under and the Mossberg 12-gauge pump to clean them once again and just to look at them. The overhead light reflects eerily in the lightly oiled bores. I practice snapping them to my shoulder a few times, then put them back, leaning them securely in their corner of the closet for the rest of the winter.

Behind the trees in the backyard the setting sun is a deep smoldering red, and it occurs to me that any more I seem to live just for the arrival of hunting season. At 34, not exactly a ripe old age but fairly ripe, my past life is measured out by the emotional chronology of certain hunting episodes, most of which involve my father and me hunting together.

In the yard a gray squirrel is scrounging through the dry brown grass for kernels of corn I've scattered there. He looks ponderous and slow, but when a second bushytail tries to invade his territory, he attacks in a gray flash and sends the intruder up the nearest tree. The sudden burst of motion reminds me that, in our family, small game hunting is what it's all about.

I love the glory of bagging a buck, of being the hero who brings home the deer meat, and of course few dishes can seriously rival properly prepared venison. But deer season is basically a one- or two-day phenomenon; you either see a buck or you don't, and if you do score, the season is over. At bottom, though, I just don't think any other hunting can compete with the thrill of a pheasant or rabbit flushed from deep cover, the

# Small Game Wisdom

By R. J. Savastio

impossible speed and erratic flight of a wind-driven dove, the mysterious way a squirrel, "trapped" in a bare tree surrounded by hunters, can apparently dematerialize and vanish.

My earliest memories are of my dad coming home with pheasants, rabbits and squirrels, and of watching him clean them in the garage. We would kneel on newspapers spread out on the floor among the piles of black walnuts he picked up in the woods and kept until they aged, first blackening and then decaying until the outer pulp fell



**DAD HADN'T** got a rabbit and I was skunked on pheasants. I had hunted hard and flushed lots of birds, but for one reason or another hadn't connected.

away from the hard, ridged shell. When it was time to crack them, Dad covered the nuts with boards, and then drove the car over them. That was about the only time the huge '53 DeSoto would fit in the garage.

The very first thing I remember Dad saying to me about anything was that squirrels should be skinned just after being shot, while still warm, since it was far easier that way. Thing was, we never skinned them until we got home, which always struck me funny and still does. I suppose we've always eschewed the easy way of doing things in favor of honoring family traditions.

### Ultimate Honor

I began going hunting with Dad when I was 8 years old. My function was that of retriever. I considered it the ultimate honor to be allowed to fetch downed pheasants from impenetrable briar patches, and the countless cuts and scratches I sustained thereby were worn proudly, like so many red badges of courage. Then Dad would caution me against being overly cocky or too confident, saying, "You're tough and strong, son, but only at nature's and God's sufferance." Like so much he told me, the words burned themselves into my memory, and as years went by the things I learned while hunting with my father began to form a sort of moral textbook for life itself.

In my first season as a real hunter at age 12, we went after squirrels in Chester County. I was using a borrowed 22-410 over-under. Dad spotted a squirrel high up in an oak tree, and yelled for me to come over and shoot it. I did, using the 410 barrel.

The squirrel fell, but was still kicking and quite alive. Dad instructed me to finish it off with a head shot from the 22. When I balked at performing this seemingly unsporting execution, Dad said, "It's part of hunting, Rich. Just as in anything that's worthwhile doing, you have to take the hard part along with the fun part." I put the squirrel out of its suffering with a shot behind the ear.

Later on in that first season, we hunted on a since-closed "pheasant farm" in Palmyra, not far from our own family farm in Hershey. Dad spotted a cockbird, sitting low and tight against a downed tree. At first I could see only the white ring around its neck, then slowly the bird came into focus. Still, the pheasant, crouched like a feathered statue, faded from sight even as I stared at it, so effective was its protective coloration in the autumn woods. It was hard to believe such a gaudy bird could be so invisible. Only the white ring gave it away.

Another lesson, or rather, dictum, I learned then was that in our family we don't shoot sitting game, period. So Dad gave me his 16-gauge pump, moved a few feet to my left, then hooted at the bird until suddenly I saw an explosion of leaves and color, and the discharge of the powerful high-brass shell somehow banged my chin with a vengeance. By the time the stars cleared up, Dad was returning with my first pheasant.

I gawked at the big beautiful bird, still thunderstruck at the unbelievable chain of events, and asked, "Did I shoot it?"

"You're holding the gun, aren't you?" Dad said, laughing heartily at my state of semi-shock. On the way home later, we were stopped for the first and only time in our lives by a game protector, and Dad was delighted to have an audience for the pheasant story. If I had a dime for every time he's told that story in the past twenty-two years, I could buy a new shotgun; plus some land. And a house.

There've been many memorable hunting trips since then, and hundreds of stories and anecdotes about our experiences in woods and fields. But the final day of the 1980 small game season stands out in my memory above all others. It was a record day, in more ways than one.

Dad had gone forty years without missing a rabbit. Hard to believe though it is, from 1940 to 1980, he hit every rabbit he shot at. He bagged a lot of other game too. Once I conservatively



estimated that Dad has shot over 4000 doves, 500 pheasants, countless squirrels and over a dozen grouse. But the rabbit record was to me always the most impressive, and I likened it to Joe DiMaggio's record for hits in fifty-six consecutive games. And I had my own little streak going too. For the previous ten years I'd shot at least two pheasants per season.

In 1980, however, it appeared that things were about to change. Rabbits were really scarce, and Dad hadn't got one, and I was skunked on pheasants. I had hunted hard and flushed lots of birds, but for one reason or another hadn't connected. Several times my pump mysteriously failed to eject properly and I didn't get off the more calculated second shot. One bird I hit fell in a clean plowed field, a rare enough event for me, but as I bent to pick him up he came to and scooted under a fence into heavy cover, gone for good. On about five birds, I just clean missed. I had almost accepted that, for this season anyway, pheasants had me psyched out.

On the final day, Dad and I were hunting the neighboring farms that border our land. It was a classic small game day, sunny yet crispy cold, the clear sky an endless field of blue. The ideal conditions made the melancholy of the season's end all the more poignant.

We got separated, and at about eighty-three I paused at the edge of a woods that gave onto a powerline clearing. Knowing Dad would emerge at the end of the powerline, I was deciding whether to wait or to walk down to meet him as he cleared the woods. I took one step, and a huge cockbird burst from the brush to my left. The miracle was that he didn't head for the woods only a few yards across the open space, but kept heading right down the line, offering me a clear shot. But when I

tried to snap the gun up, I couldn't. The barrel of my 12-gauge was hung up on a thin branch of a small sapling.

I fought to free it, counting in tens of yards—20, 30, 40—the pheasant's flight as he made his way safely out of range. "He knew," I told myself. "He knew that branch was there. It just figures."

### That Kind of Season

It had been just that kind of season. Of course there's always a measure of good feeling when a game bird or animal escapes, for you figure he'll be there next year. But bagging that bird would have made up for a lot of frustration.

We hunted until lunchtime without flushing anything but a few angry bluejays and a couple of does which ambled away with pre-deer season non-chalance.

Now, neither Dad nor I usually hunts after lunch on the last day of small game season, feeling that birds and animals which have survived since opening day deserve to spend the last few hours of the season out of danger. But Dad was probably thinking of his rabbit record, and I was just plain mad at pheasants for making a fool out of me all season, so that day we broke with



**CHECKING** his watch, Dad said, "Two minutes of legal shooting time left, time to quit." I couldn't believe we hadn't got the last bird, but as Dad pointed out, it's the missed shots you never forget.

tradition and hunted all afternoon.

By four o'clock Dad's boundless stamina let him stride briskly up the last hill that ended at the field leading back to the house. Thirty yards behind him, I trudged along, almost exhausted. I felt a surge of gratitude to the powers that be for Dad's health and robust energy, that at 70 he could be so fresh and springy after eight hours of pounding the brush. It was a great season and a great day and we were all going to live forever.

He reached the woodline and waited for me to make the final push up the hill to the field. Just as I approached the crest, there was a thopping *WHOOSH!* of leaves and wings as a big cockbird exploded from cover not ten feet from Dad. We each reacted quickly enough to fire three shots at the bird, and missed all six. The short powerful wings quickly took the pheasant out of range, across the road and down into the next valley, his body glowing a dark purple in the setting sunlight.

"Isn't that something!" Dad said, his voice reflecting nought but happy amazement.

"I don't believe it," I snapped. "I don't believe anything about this whole season. That bird was in perfect range."

Checking his watch, Dad said, "Two minutes of legal shooting time left, time to quit."

We unloaded the fresh shells we'd automatically stuffed into the guns after shooting at the pheasant. As we walked toward the farmhouse, our feet sinking into the soft earth, I was still huffing with disbelief and disappointment.

"I can't believe I missed that bird!"

"Well," Dad said, "they have a destiny just like we do. When it's their time to go, you hit them; when it's not, you don't. And besides, it's always the missed shots that you never forget. That's where all the best memories come from and the best stories."

He was right, as usual, and as we walked along in the gathering darkness I mentally reviewed the day and the past five weeks; all the near-misses, the lost pheasant, my recalcitrant 12-gauge, Dad's broken string of perfect rabbit seasons. It seemed that the impact of all the emotions of my entire hunting life had found a culmination in that final day of the 1980 season. And I wondered if some subconscious sentiment had affected us on those last six shots.

"Actually," I said, "I'm glad that last bird got away."

"I am too," Dad said.



**JERRY ROSSETTI**, of Lansdale, had a fine hunting season in 1983. He took a 4-point deer, a nice bear, and a 16½-lb. gobbler, all in Potter County.

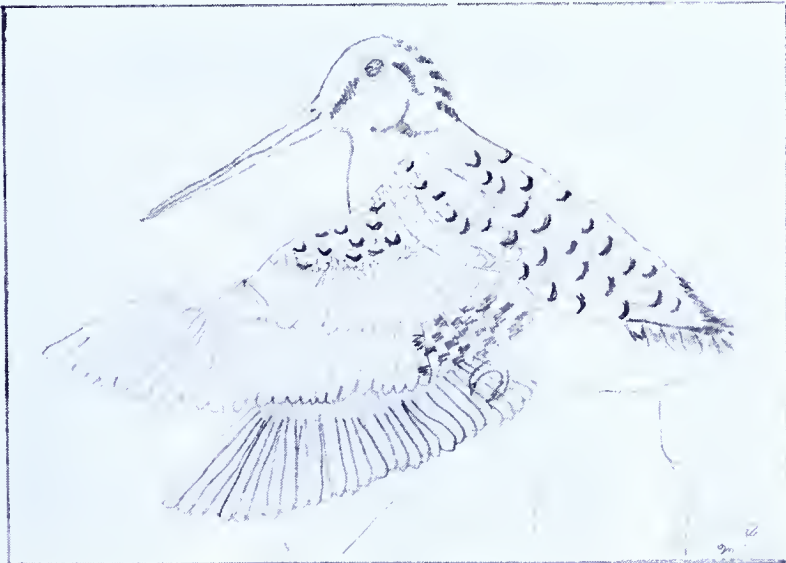


# young artists page



**Matt Moul, 14, RD 3, Hanover,  
is a 9th grader at  
Spring Grove Junior High**

**Andy Marcinko, 16, of Johnstown,  
is in 10th grade at the  
Conemaugh Township High School**





**BILL EVERETT**, above, Wilkes-Barre, called for over 90 minutes to bring this Luzerne County bird within range. Below is **JIM GRAZIER**, Tyrone, displaying his first spring trophy, a 20-pounder from Huntingdon County.



**RICHARD GOMBERT**, Lehighton, went to Potter County for his 18½-pound gobbler. Its beard measured 8½-inches.

**TONY BUDASH**, left, and **JON GRUEHR**, Bushkill, spent over an hour and a half talking to this 19-pound Pike County gobbler.



**DUANE KUHN**, Milford, County to call in this 20-



**BOB GRAY**, Green Park, took his first spring gobbler from a Game Lands in Juniata County. **CARL MCCARDELL**, below right, Uwchland, went to Bradford County for his turkey.



**DOUG BASINGER**, Indian Head, went to Ohiopyle area for this 21½-pound turkey sports a 9½-inch beard.



**TURKEY**  
**TALK**  
**T**



# KEY KIN' ME

in Pike  
turkey.



**JOAN NEHODA**, Easton, hunted two seasons before connecting with a spring gobbler, this 20-pounder from Potter County.



**CARL GRAEHLING**, above, Grantville, took this big gobbler from Tioga County. **BECKY DREESE**, below, is proud of her Centre County trophy, a 17½-pounder with 8½-inch beard.



**JOHN and DAVE BROWN**, Bear Lake, each had a Warren County trophy before the season was 45 minutes old. Jim Rice, they report, did an excellent job calling the two gobblers in.



**LINDA DIEFFENBACH**, Williamsport, looks happy with her 13-pound Lycoming County turkey.

**CHRIS TAU**, left, Saegertown, stayed in Crawford County to bag his first turkey, a 21½-pounder with 11-inch beard. **R. WAYNE THOMPSON**, right, traveled from Browns Mills, New Jersey, to Potter County for this 20-pound gobbler.





## Helping The Ladies

One morning during the second week of buck season, two orange-clad ladies came to the Training School with a rifle problem. A live round had jammed in the lever action carbine one was using. "It's really disrupting our deer hunting," they said. After I corrected the malfunction, the lady with the jammed rifle proudly volunteered her nonresident license, from which I noticed she was about to celebrate her 73rd Christmas. Her friend, equally young, said they had been coming to Jefferson County to hunt deer for the last 20 years. — Richard D. Furry, Supervisor, Training School.



## Some Pets

With all the alarm in recent months about rabies, I thought it might reduce the desire by individuals to keep animals in captivity—but I was wrong. In just this past month I have received requests for permits and/or information concerning the keeping of a python, a monkey, and a baby alligator. — SIE John A. Badger, Ligonier.

## More To Eat

*TIOGA COUNTY*—I was surprised at the number of deer taken in the big woods section of this county last year. I can only conclude that the clearcuts on the State Forests here have really made a difference. There is a lot more feed there now. And not only did the deer return, so did the hunters. — DGP Frank Bernstein, Middlebury Center.

## Banner Year

*LUZERNE COUNTY*—While comparing last year's reports and activities with those of preceding years, I was pleased to see that the number of prosecutions, especially for serious infractions of the Game Law, was down 20 percent, even though my deputies and I put in more time afield. And, for the first time, not one hunting accident was reported in my district. — DGP Edward Zindell, Wilkes-Barre.

## For Hawk Watchers

*BEDFORD COUNTY*—A new hawk watching site for Pennsylvania has been established in this county on SGL 97, at the top of Tussey Mountain, about one mile from the town of Everett. Dr. Chris Dick and his wife Sally, of the Allegheny Plateau Audubon Society, were instrumental in establishing the site, and enthusiastically report sighting 965 migrating raptors there last fall. Their success should be even better in the years to come as more interest is shown in this newly established hawk watching location. — DGP David Koppenhaver, Everett.





### Same Old Story

**MONTGOMERY COUNTY**—Wild animals never make good pets. A good example is the man here who had obtained a deer illegally. During the rutting season, the full-grown buck, which at that time had no fear of humans, sent one man to the hospital and also went after several other people before finally escaping into a wooded area. Please leave them in the woods. —DGP William Wasserman, Montgomeryville.

### Prepared

**LANCASTER COUNTY**—Deputy Louis Gable and I recently apprehended three individuals for jacklighting a deer in Franklin County. It was after midnight when we knocked on the door of the last defendant, confiscated some illegal venison, and issued a citation. Upon returning to my vehicle parked by the defendant's home, I discovered it would not start. Lou and I spent about ten minutes trying to start the vehicle, but to no avail. The defendant came out and asked if I wanted him to jump-start my vehicle. After we got it going, the defendant said, "This is really something. First you empty my freezer and fine me \$200, then I have to jump-start your car to get you out of here." At least I had my own jumper cables. —DGP John A. Shutter, Jr., Lancaster.

### Continuing Ed

**CENTRE COUNTY**—We're continually learning something new. DGP Joe Wiker and I recently learned some new things while trying to get a bullet from a 30-06 for ballistic tests. To do this we filled a garbage can with water and then placed the can in a stream to prevent the sides of the can from blowing out. I then got on a footbridge five feet above the water and fired down into the waterfilled can. From this experience Officer Wiker learned that they lied to him in the service when they told him that bullets would travel only five or six inches in water before losing all their energy—we had a neat hole in the bottom of the can to prove it. And I learned that five feet above the water is not far enough to avoid getting totally drenched from the splash of such a bullet hitting the water. —DGP George Mock, Coburn.

### Got Her Anyway

During the antlerless deer season, Terry Cockroft of Athens was observing several deer and noticed one of them appeared to be wounded. Deciding to try to take the injured deer, he fired a shot and all the deer disappeared. He searched the area and found the deer at the bottom of a 35-foot cliff, its neck broken. Upon dressing the deer out, he discovered it had only been shot once, which meant he must have missed it. —LM Chester Harris, Athens.

### Where Else?

**DAUPHIN COUNTY**—John Hooper was a happy fellow when he checked his trapline two days after Christmas. In his conibear he had a 40-pound beaver. This is the first beaver taken legally in this district in many years. And where did he take this trophy? Beaver Creek, of course. —DGP Skip Littwin, Hummelstown.



## Goosed

**LEBANON COUNTY**—Some of us in the southeast, where avian influenza was such a problem last year, were asked to examine pheasants taken by hunters during small game season. The avian flu task force provided us with kits and instructions to take swab samples from the throat and cloaca. Everything went well until one thought-to-be-dead pheasant suddenly revived when the cloacal swabbing was taken. If I have the facts correct, the episode turned into a foot race between a deputy and a determined-to-escape pheasant. I heard someone mumble that a certain deputy won't ever make it as a biologist but there's hope for him as a retriever.—DGP Gary W. Smith, Lebanon.

## Whose Problem?

**VENANGO COUNTY**—I recently received a call from a distraught woman who reported that her cat, which she allowed to roam freely, recently came home showing signs of what she felt were rabies. She wanted to know what we were going to do about it. I find it incredible that many pet owners show such little consideration for their pets by not having them vaccinated, allowing them to roam, and then expect someone else to handle the repercussions.—DGP Len Hribar, Oil City.

## What Not To Do

**ADAMS COUNTY**—I recently had a case where the operator of a car struck a raccoon. He thought he had struck someone's pet cat, so he went back to investigate. Seeing the raccoon lying on the roadway, it occurred to him that this might be a good opportunity to make a few dollars from a local fur dealer. So, despite the fact it's against the law to pick up roadkilled animals other than deer, he took the raccoon. At home he opened the trunk and reached in to pull out the raccoon. It wasn't dead. As a matter of fact, it was quite alive and well, and it bit him five times on the left hand before he slammed the trunk lid down, confining the raccoon. It then occurred to the man that we have a rabies epidemic here. You can guess the rest of the story. He headed to the hospital for emergency treatment and the first of his rabies shots, while I went to remove the raccoon. We had to kill it and prepare the head for delivery to the lab so it could be tested for rabies. As I write this, our friend is anxiously awaiting the results. All this trouble, concern and expense would have been avoided if he had just left that raccoon along the road.—DGP Larry Haynes, Biglerville.

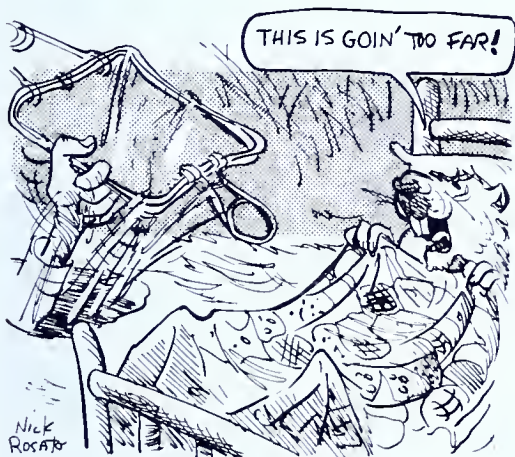
## Works Sometimes

**CAMERON COUNTY**—While I was contacting landowners enrolled in our public access programs, Pete Garman of Sinnemahoning introduced me to an unusual wildlife damage control measure. For years Mr. Garman had been bothered by bluejays raiding his high bush blueberries, picking the fruit just as it became ripe. This past year, however, Pete purchased two colorful 6-foot inflatable snakes from a mail order catalog and placed them on his bushes. He reports that the jays avoided his berries like the plague, especially when the wind blew, making these artificial serpents seem even more lifelike.—DGP Joe Carlos, Driftwood.



## City Callers

**ALLEGHENY COUNTY**—I had to chuckle when I read Dave Overcash's "DGP Diary" in the December **GAME NEWS**. He mentioned receiving 340 telephone calls during the previous December. This might be a large number of calls in Monroe County, but on just the second day of this antlerless deer season, I received over 350 phone calls. This is not an estimate, either, as I logged each one. And 350 wasn't that unusual. I received over 500 calls during the preceeding two days. **HELP!**—DGP Dale E. Hockenberry, Pittsburgh.



## Give An Inch, Take . . .

**McKEAN COUNTY**—Beaver trapping regulations were changed this year, permitting the use of any number or length of guide sticks and the placement of traps as close as 15 feet to a house or dam (previously, they could be no closer than 25 feet). Despite these relaxed restrictions, we had many more violations than normal in the first week of the past beaver season. Some trappers must feel that because a few regulations were dropped, they can do whatever they want. We had traps set on beaver houses, traps set within 15 feet of a dam, and many tagging violations. Also, some trappers were using man-made materials to direct the beavers. —DGP Jim Rankin, Port Allegany.



## A Lot's In The Mind

**BUTLER COUNTY**—Well, another hunting season is now history, and whether or not you feel it was successful probably depends on the type of luck you had. If you got your deer, turkey, or whatever, you probably feel it was. If not, you probably have negative feelings. There is no way the Game Commission can guarantee every hunter a deer. The quality of the hunt depends on the hunter and the type of attitude or expectations he has. —DGP Larry Heade, Butler.

## Warming Up

**MONTOUR & NORTHERN NORTHUMBERLAND COUNTIES**—I would like to thank the sportsmen, concerned citizens, and the Valley Township Fire Department for their help in putting out a forest fire which my deputy and I discovered south of Washingtonville on the first day of small game season. I would also like to thank Alan Walter and the Liberty Township Fire Department for their assistance when my state car caught fire on the first day of buck season.

(PS to my supervisor: By the first day of spring gobbler season I hope to have as standard equipment in my vehicle a fire rake, an Indian backpack, two new fire extinguishers, and a pack of hot dogs.)—DGP Daniel Clark, Potts Grove.

## Double Duty

**CLARION COUNTY**—During most of 1984, I was responsible for this entire county. I did my best, but some things never got done. To those who felt their problems were not given enough attention, I apologize. To those **SPORTS** who contributed information concerning Game Law violations, I extend my thanks and gratitude. And to Land Manager Jim Bowers and his Food and Cover crew, and to all the deputies in this county—my special thanks. It was the outstanding assistance from friends and strangers that made things run as well as they did last year, and allow me to face 1985 with a great deal of pride and optimism. —DGP Gordon Couillard, Clarion.



## Cut The Trees, Too

**PIKE COUNTY**—Animal damage complaints occupy much of a game protector's time. We are asked to remove everything from bats to bears, usually for a good reason. During November, however, I was asked to trap five raccoons from a person's property in a second-home development here. The reason given was that the raccoons kept eating the food placed out for the person's two cats. The cats were allowed to roam free during the week while the owner was away. It was suggested that while I was at it, I should take all other wild animals I might catch, also. —DGP Lawrence Kuznar, Matamoras.

## Helping Hand

**CRAWFORD COUNTY**—While Deputy Jim Foulk and his son Paul were driving around Pymatuning last December, they spotted a young deer in the lake. It was unable to move because of the ice. The knew the deer was trapped, so Paul donned waders and a rope while Jim held a safety line and managed to get the deer out. It was released unharmed. —DGP Dave Myers, Linesville.

## For Safety's Sake

**CLEARFIELD COUNTY**—Many hunting accidents could be avoided if the Game Law were obeyed. Over the past several years I have observed many individuals upon seeing a game protector, either run to their parked vehicle to get a loaded firearm or, while driving down the road, try to unload a firearm. It is obvious that these individuals knew they were violating the Game Law. I often wonder if they will ever realize that the laws were developed for their safety and the safety of others, not as some sort of competition between them and the game protector. I've always felt that every day I do not have to investigate a hunting accident is a day when everybody wins. Please obey the law, and be careful. —DGP Don Zimmerman, Morrisdale.

## Too Close

**ERIE COUNTY**—Safety Zone violations (hunting within 150 yards of an occupied building) are not uncommon in my district. Over the years I have seen some hunters pretty close to houses, but this past season I found what I believe was a record—I arrested two individuals for hunting within *15 feet* of a house. Such a complete lack of thoughtfulness causes a lot of areas to be closed to hunting in a hurry. —DGP Andy Martin, Erie.



# Second Highest Buck Harvest

By Ted Godshall

PGC Information Specialist

PENNSYLVANIA'S deer hunters had an excellent year during the 1984 seasons, recording the second largest buck harvest in history, according to reports filed with the Game Commission.

Report cards mailed in by successful hunters indicate 76,500 antlered deer were taken, while another 63,680 hunters reported tagging antlerless deer. This produced a total reported whitetail kill of 140,180. In the preceding year, the figures were 70,233 antlered deer and 66,060 antlerless whitetails, a total of 136,293 deer.

Pennsylvania's all-time record buck harvest was registered in 1967, when 78,268 hunters reported tagging whitetails with antlers. The 1984 antlerless harvest was the fourteenth largest on record, while the total harvest was the seventh biggest ever.

Prior to the season, the Game Commission said it hoped hunters would report taking at least 70,000 bucks, and the antlerless license allocation was designed to produce a harvest of about 69,000. Not all 1984 antlerless licenses were sold, and requiring hunters to choose between an antlerless and a flintlock license obviously affected the number of antlerless deer taken.

Of the twenty-two most successful buck seasons in the state's history, twenty-one have occurred in the last twenty-one years. The Game Commission is processing data to determine if the increased number of report cards filed means an increase in the harvest, or if a greater percentage of successful hunters filed report cards, as required by law. 1984 marks the fifth consecutive year in which the reported buck harvest exceeded 70,000.

Potter County, traditionally the leading deer producer, again was first during the most recent seasons, leading in

the number of bucks, antlerless deer, and total number of deer taken. Hunters returned 2,992 buck cards and another 3,162 antlerless cards, for a total of 6,154 whitetails from "God's Country." During the previous year, Potter also led all other counties, with 2,376 bucks and another 2,653 antlerless deer, for a total of 5,029 whitetails.

Following Potter in antlered deer in 1984 were Tioga, 2,364; Bradford, 2,276; McKean, 2,220; and Clearfield, 2,172. Other leading antlerless counties were Tioga, 2,587; Bradford, 2,265; McKean, 1,978; and Lycoming, 1,902. Counties other than Potter leading in total 1984 deer were Tioga, 4,951; Bradford, 4,541; McKean, 4,198; and Clearfield, 4,139.

All figures are accurate counts of report cards filed by hunters. Actually, only slightly over one half of all successful hunters report their deer kills to the Game Commission. As always, the Commission extends an open invitation to any interested individual or group to examine and/or count the cards on file in the Harrisburg office.

See map on next page.

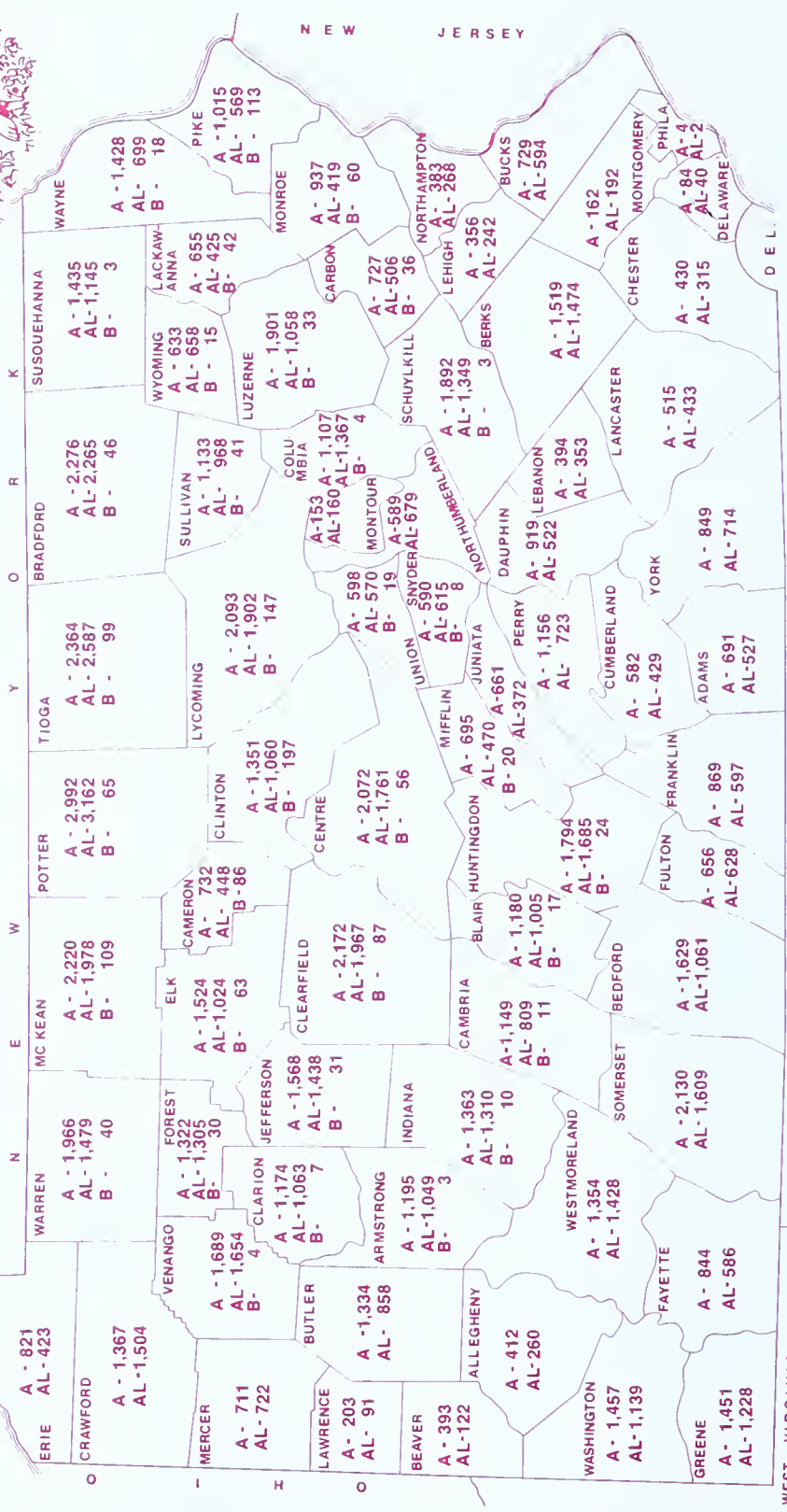
CHANG, MICHAEL, of Harrisburg, made his 100th buck in Potter County last season with a 30-point buckling. He took it on a 100th buck hunt.



1984

DEER & BEAR HARVEST

PENNSYLVANIA GAME COMMISSION



ANTLERED DEER (SYMBOL - A)		ANTLERLESS DEER (SYMBOL - AL)	
REGULAR SEASON	71,022		56,327
COUNTY UNKNOWN	1,751		1,616
ARCHERY SEASON	3,507		3,067
MUZZLELOADER SEASON	220		2,670
TOTAL	76,500		63,680

GRAND TOTAL BEAR (SYMBOL - B)	1,547
GRAND TOTAL DEER HARVEST	140,180



# Elk Herd Continues Stable

Pennsylvania's elk herd remains stable. That's the word from ground and aerial census teams which took note of the current population late in January.

Census teams counted 131 elk this year, compared with 119 last year. However, because of inclement weather and poor flying conditions, it was believed that not all elk were seen last year, so the population appears stable.

At least twenty mature bulls, along with nine spike bulls, were observed. Most animals were seen on State Game and Forest Lands in Elk and Cameron counties.

Two weeks prior to the aerial count, ground survey crews scour designated areas to determine the presence or absence of elk. Following the pre-census activity, the actual count is carried out

in well-defined distinct survey units small enough for two to four persons to cover on the ground. Personnel from the Game Commission, DER's Bureau of Forestry, Hammermill Paper Company, and volunteers are involved in the operation.

During the actual count, a helicopter with trained personnel from various agencies is used, in conjunction with ground crews. The location, number, sex and age of each elk is recorded, keeping the possibility of duplication to a minimum.

As a supplement to the census, data are kept throughout the year on known elk mortality, and sightings of marked and unmarked animals. These data serve as a check on actual census figures, which are believed by the Game Commission to be highly accurate.

## Hunter Ed Course Goes To 10 Hours

Beginning in 1986, the Game Commission plans to increase the minimum length of its hunter education program to ten hours. The program will incorporate additional material dealing with wildlife management and the role of sportsmen in protecting our natural resources.

According to Jim Filkosky, Chief of the Division of Hunter and Trapper Education, "Although Pennsylvania's program is recognized as among the best in the nation, we are one of the last states to adopt a ten-hour format, a format that adequately provides enough time to cover all the material necessary to make Pennsylvania's first-time hunters responsible and knowledgeable sportsmen—sportsmen who not only hunt safely, but also understand and appreciate the fundamentals of wildlife management."

Filkosky went on to note, "The U.S. Fish and Wildlife Service recently evaluated our program and gave us high marks. However, they do have some

recommendations on curriculum, and we plan to make use of those recommendations as we consider course content for the new ten-hour program which we'll incorporate beginning next January."

---

### In the Eye of the Beholder

Some people get the creeps at the sight of a spider. But to many people around the world, these eight-legged creatures are a sign of good luck, good weather and good health. In fact, during the 1500s, some English doctors thought spider-and-butter sandwiches could cure high fevers.

### This is Progress?

More than 40 percent of the world's rain forests have been cut down or burned down. Studies indicate this is reducing rainfall and increasing temperatures—perhaps affecting global weather patterns.

# Taxidermy Examination

**A**PPPLICANTS who plan to take the 1985 Pennsylvania taxidermy examination should file applications with district game protectors prior to May 15. Applications are available from district game protectors and from the six regional offices of the Pennsylvania Game Commission.

The 49th annual taxidermy examination will be given at the Game Commission's Southcentral Regional Office at Huntingdon on June 17, 18, 19 and, if necessary, June 20. The examination, which is in two parts, requires half a day to complete.

Completed applications should be filed with the district game protector in the area where the applicant resides. A \$25 nonreturnable fee must accompany the application to help cover the cost of conducting the examination. There is an additional annual fee of \$25 for those who successfully pass the examination and wish to be licensed.

Taxidermists must be sufficiently skilled in their profession so that a person with an irreplaceable trophy can confidently leave it with any commercial taxidermist in Pennsylvania, knowing that the specimen will be cared for properly and returned to the owner as a permanent reminder of the successful hunting or fishing trip.

Anyone who practices taxidermy for profit in Pennsylvania must have a permit issued by the Pennsylvania Game Commission. The permit is issued to persons 18 years of age or older who are residents of Pennsylvania and who pass the examination conducted annually by the Taxidermy Examining Board.

Each applicant must present to the board at the time of the examination five specimens which have been prepared within the past three years. An affidavit that the applicant has personally prepared the specimens must also be presented to the Taxidermy Board. Specimens to be presented must include one antlered whitetail deer

head, one small mammal, one upland game bird, one species of waterfowl, and one fish or reptile. Both birds must be mounted with legs and feet visible. All specimens must be found in the wild within the Commonwealth.

The written part of the taxidermy examination will be on taxidermy methods and procedures, with a few questions concerning the game, fish and federal laws, as they might relate to taxidermy.

## Judging Criteria for Taxidermy Examination

The Taxidermy Board will use the following criteria in judging each specimen presented for examination:

1. Lifelike in appearance—This will include proportion, muscle structure, setting of the eyes and antlers, proper placement of ears, wings, feet and legs, workmanship around lips and nose and durability of work.

2. Sewing—Seams must not show and must be completely closed. Patching of skin must be of the same color and texture.

3. Large game heads—Ears . . . cartilage must be removed, replaced with paper or plastic liners or other media.

4. Restoration of color—Any color used must give a natural appearance. Over-painting and over-waxing are not acceptable.

5. Preservation—Any part subject to deterioration must be adequately preserved.

6. Cleanliness of specimen—Evidence of grease, dirt, borax, sawdust, etc., on specimen is not acceptable.

7. No novelties acceptable.

8. Support strength—Wires or rods used for support in legs, necks, wings, etc., must be of sufficient strength for their intended use.

Currently, 480 taxidermists in Pennsylvania are licensed by the Game Commission.



# Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Doult, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

## Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER PATCH .....	\$ 3.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1985 ART PRINT "Big Woods Bobcat" .....	\$125.00
_____	1984 ART PRINT "Dutch Country Bluebirds" .....	\$125.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

## Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

## Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 charts) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

## SPORT Items

_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

## GAME NEWS

_____	1 Year Subscription .....	\$ 6.00
_____	3 Year Subscription .....	\$ 16.50
_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 3.50

## Waterfowl Management Stamps (Voluntary)

_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

# The Maturing Of A Hunter

By Chris Dolnack

A SUDDEN shuffle in the autumn leaves below riveted my attention on a young hen. I had just finished a most pleading kee-kee run on my slate call, and for the most part was caught off guard. As the jenny passed behind a hemlock, I shouldered my scattergun and drew a bead on her neck when she emerged. The moment of decision had arrived. I figured the range at 50 yards, but because I habitually underestimate distances, I held off on the shot. No sense in risking a cripple, I thought. Before the flock gathered I'd had seven different turkeys answering me and each other. I'd been so captivated by their beckonings that I never had the presence of mind to run the old hen off or bust up the flock prior to roosting.

The day before had found me sitting under an ash waiting for squirrels. A head materialized on a branch. Remaining motionless, I further observed the bushy tail move out toward the end of the limb. My thoughts had already turned to squirrel pot-pie, but as my quarry began to gnaw on an acorn I lowered the Winchester and watched

this curious little creature for about ten minutes before it disappeared.

That weekend gave me much to think about, and one night over at the house I posed a question to my father. "Am I losing it, Dad?"

"Losing what?"

"The killer instinct," I said, and related my experiences of the week before.

He smiled. "No, you're just mellowing with age, or rather experience. Some guys never reach that point. They don't appreciate nature for what it is. All game is to be taken and gloated over, as far as they're concerned. It's a changing of attitude more than anything else."

It suddenly dawned on me that I was maturing as a hunter.

## Taking Less

Reflecting upon the past couple of hunting seasons, I realized that although I was seeing as much game as ever, I was taking less and less. Perhaps my upbringing had something to do with it. For as long as I can remember, several basics were hammered into me. The first and foremost of these was safety. Treat every gun as if it were loaded . . . watch that muzzle . . . watch what's beyond the target . . . identify your quarry. I was acutely aware of all these principles before I ever held a firearm in my hands.

We were required to eat any game that was put on the table by our gun. "Don't shoot an animal unless you are going to eat it," was heard every time we went afield. Another reminder, often heard from my grandfather, was, "Make the first shot count." To aid in reinforcing this, I and my two brothers were started off small game hunting with an H&R 20-gauge single shot. Many were the times when Dad's gun or my grandfather's 16-gauge would fold a cockbird after my overanxious-





ness had caused a hurried — and futile — shot.

However, after proving my prowess with the little Topper, I was presented with a Winchester Model 1200 pump gun in 12 gauge on my sixteenth birthday.

Respect for game and game laws was another prerequisite for joining the family clan in the hunt. Countless hours spent in observing wildlife during my boyhood years brought on a deep appreciation of nature. Deer in their red summer coats, coming to the field's edge at dusk. Gray squirrels gathering and hoarding their winter stores. The awe inspiring sight of a ruffed grouse drumming on a moss-covered log during my first spring gobbler season.

Recalling these factors helped me to realize that over the years I had become a much different hunter and person. However, the three days at the end of last deer season probably had as much impact. On the opening day of antlerless season I made a poor shot on a baldy. Hours later, heavy snowfall wiped out the trail. I had lost my first piece of game. That deer died, and I knew it. At age twenty, I cried over it. In addition to this, the first three squirrels I shot the following season were lost.

I seriously considered packing it in. But in the end I decided to finish out the season and then make a decision. During that period the previously mentioned experiences occurred, and now I know what has taken place.

I love to hunt more than anything else in this world. (Apologies to my wife, for hunting took place for ten years before we married.) I am enjoy-



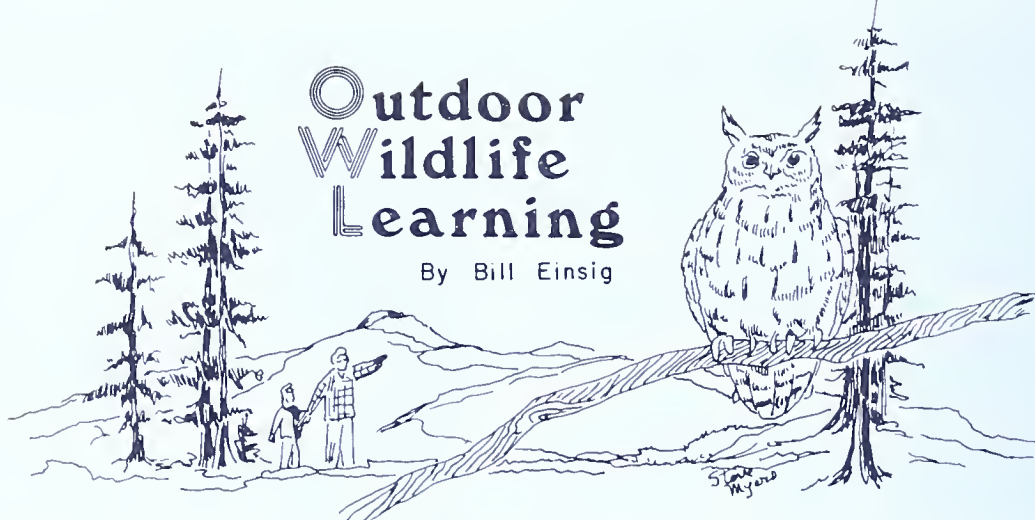
**MY THOUGHTS** had turned to squirrel potpie, but I lowered the Winchester and watched the little creature for about ten minutes before it disappeared.

ing the hunt more than ever while being scrupulously selective in my choice of shots. Fire discipline they call it in the military. I compete not with friends at work or at the club but with myself, much the same way golfers and bowlers compete with themselves to better their scores. I try to make each shot better than the last. No Hail Mary attempts. Clear, precise, fire-up-the-skillet shots. I even find myself passing those up at times. Perhaps someday I too can relate such things to a son or daughter and he too will mature, not only as a hunter but also as a human being.

## Thoughts While Walking

*The Constitution does not say Government shall decree the right to keep and bear arms. The Constitution says, "The right of the people to keep and bear arms shall not be infringed."*

—President Ronald Reagan



**I**F I HAD to choose one activity that I most enjoy with school students, it would be the study of owl pellets. No other investigation generates such natural motivation and intense interest in youngsters at almost all grade levels. Maybe the very idea of working with regurgitated leftovers appeals to a certain element in our human nature. Maybe the activity is simply unique; something out of the ordinary that strikes a more responsive chord than the more routine problems the students face.

My guess, though, is that my students are only responding as many of us have in the past when we confronted an element of nature firsthand and stood on the threshold of making a discovery that was totally our own. The owl pellet is an unknown quantity that bears telltale evidence of the natural workings of another living thing; a bundle of clues that promises to tell us something about the owl that formed it—if we have the wisdom to understand. Science in its most raw form is always exciting.

So let's look at these owl pellets a bit closer to find out what they are and how they can be used to learn more about the owl that made them.

## What are owl pellets?

Owls, like certain other birds such as gulls, hawks, herons and crows, are able to regurgitate undigested foodstuff from their stomachs. Some of these birds have gastric juices strong enough to digest

bones, and their pellets consist mostly of hair and feathers. But owls do not digest bone. Therefore, their pellets contain skeletal remains of their victims and it is these bones that provide the clues to the owl's diet and feeding habits.

Most owls also eat their prey whole. That means complete skeletons are usually contained in the stomach of a resting owl who has just returned from a feeding trip. When digestion is completed and the remains regurgitated, these bones are expelled and are available to the collector.

Each pellet, however, does not necessarily contain entire skeletons. The owl may form and expel from one to four pellets representing the previous night's feeding. If the owl had eaten four mice and one shrew, all those skeletons could become mixed in the stomach and included into any of the four pellets. It is not unusual to find pellets with a mass of small bones but no skull.

## Where can you find pellets?

The easiest pellets to find are those of the barn owl. Look for them in barns and other buildings where barn owls are known to nest.

You can also purchase pellets from Hawks, Owls and Wildlife, Russell Road, Westfield, Mass. 01085. The supplier provides pellets in elementary and secondary kits, along with lesson ideas and directions. Their pellets are high quality; fumigated to protect them



from insect attack and individually wrapped in aluminum foil.

Convenient as they are, commercial pellets have one major disadvantage — they don't represent the dietary remains of a single owl and therefore can't be used in a real way to monitor actual feeding patterns. If at all possible, make connections with farmers and birders in your area and locate an active barn owl. In a short time you'll have all the pellets you'll need.

Mark each pellet as accurately as possible. Be sure to indicate the collection site, date of collection and, if possible, the date the pellet was formed.

## What can you do with them?

If you are working with a group of students, put them in groups of three and give them an owl pellet and a paper towel or newsprint to cover the work area. They'll also need a few basic tools; forceps and probes work best to pull matted hair from the bones.

1. Measure the length and maximum diameter of each pellet. Notes on general appearance and color will be helpful in comparing pellets from various birds.

2. Dissect the pellet, looking carefully for all bones. Clean these thoroughly and lay them aside, perhaps in a small container marked for that particular pellet. Some references suggest soaking the pellet in water before dissecting it. That is usually not necessary and makes the whole operation a bit more messy.

3. Identify the species of prey animals using the skull characteristics and a good skull key. One handy reference is *Mammals of Pennsylvania*, published by the Game Commission (price, \$4). This book contains dental formulas and some skull drawings even though it does not contain a skull key. Each mammal species is described in some detail and students can learn more about the prey using this reference.

The meadow vole (*Microtus*), deer mouse (*Peromyscus*), and shrews (*Blarina*, *Sorex*) are the most common species found in barn owl pellets. Rats, other shrews, and moles are not uncommon.

4. Tally the number of each prey species for the entire class. Which species is the most numerous prey of your barn owl?

5. Convert individual prey animals into their biomass equivalent and determine which species contributes the most biomass to the owl's diet. Hawks, Owls and Wildlife lists the following average weights for common prey species: voles, 40 grams; shrews, 5 grams; moles, 55 grams; rats, 240 grams; mice, 20 grams; and small birds, 40 grams.

Multiply the number of each species found in the pellets by the corresponding weight and total for all species. Now, find the percent biomass contributed to the diet by any species by dividing the total weight for that species by the total weight of all species and multiply by 100 to get a percent.

6. Construct graphs that illustrate the percent of biomass contributed by prey species and the frequency of occurrence of species in barn owl pellets.

7. Conduct this same analysis at different times of the year. Does the barn owl diet change significantly from season to season?

8. Conduct this analysis on pellets collected from different habitats. Do all barn owls, regardless of geographic habitat, have essentially the same diet?

9. Save and compare analysis data over a period of years. Do the owl pellet contents reflect any population shifts in the prey species?

Analysis of owl pellets can be the stepping stone for many students into real research. Their contributions can be valuable to professionals interested in learning more about the behavior of these magnificent birds of prey. But best of all, working with owl pellets is fun.

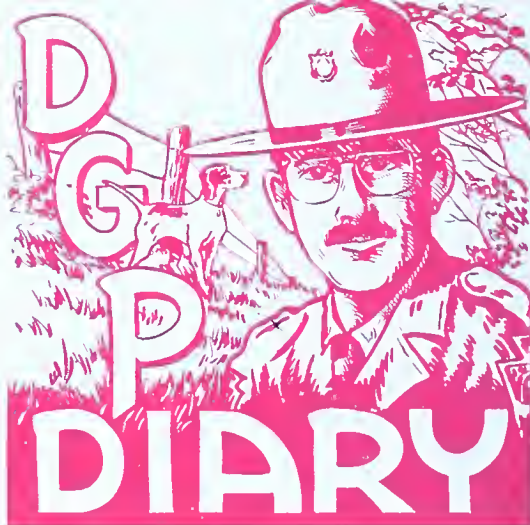
**A**PRIL brings the opening of trout season and its accompanying influx of sportsmen. It also brings to a close the tranquil winter months when you can drive for miles never seeing another car, or hike in the mountains for hours without a sign of human disturbance.

*April 1*—Randy Fleming, one of the deputies from Elk County, has organized a series of weekly training seminars. This evening's guest instructors include Ed Zettle, director of the Elk County Radio Control Center, who is speaking on law enforcement communications, Assistant District Attorney Vernon Roof, who covers civil liability, and Benzinger Township Police Chief Gary Eckert, who is teaching public relations. In previous weeks Patrolman Brad Harshbarger has covered the handling of evidence and crime scene photography, District Attorney James Meyer instructed on the rules of criminal procedure, and District Justice Elizabeth Friedl spoke on hearing procedures. The modern deputy game protector takes pride in his professionalism and seeks out all the training he can find, as is shown by a nearly perfect attendance record over the past several weeks.

*April 4*—I am patrolling Mix and Wykoff Runs for out-of-season trout fishing.

*April 6*—Elk Research Assistant Rawley Cogan and I present programs at the Spring Sports Show in Emporium in the evening. The Sports Show is a one-day annual affair sponsored by the local Trout Unlimited chapter. Rawley gives his elk slide talk and I follow with a presentation on deer management. Earlier speakers have run overtime so it is 11 p.m. when I get the floor. The crowd has thinned out due to the lateness of the hour, and the people left are the genuinely interested ones. They participate freely in the discussion, and ask a lot of well thought out questions. We finish at 1 a.m. but it is worth it for I believe this group now really understands our management program and has renewed faith in it.

*April 7*—I attend the monthly meeting of the Sinnemahoning Sportsmen's Club where we discuss the theft of several tons of corn from their crib this past winter. The culprits had to have made several trips with pickups to steal such a large quantity.



**By Joe Carlos**

**District Game Protector  
Cameron County**

Dues to the club are only \$7 a year, and a lot of campers and nonresidents join, feeling they are making a contribution to the survival of game here in Cameron County. The corn theft has badly hurt the club financially, but they sacrifice on some other projects to make an emergency purchase. Irrespective of anyone's personal opinion concerning the value of winter feeding, one thing is certain: Once feeding is begun it should be continued. Animals which are accustomed to visiting a feeder each day will continue to come into it day after day, looking for that familiar handout even if the feeder becomes empty. As they keep doing so, their physical condition slowly deteriorates.

*April 8*—The deputies and I attend another training seminar. Dave Bujak, patrolman with the Benzinger Township Police Department, is covering officer survival tactics.

*April 12*—The Fish Commission is running a class of Waterways Conservation Officers through their training school, and our local officer, Stan Hastings, has been assigned one of the trainees for a week of field experience. I am extremely impressed with the credentials of this group of student officers, and pleased to see them accept their first female trainee. Bryan Burger, the student assigned here, comes with an impressive background, including a college education and a tour of duty in Alaska as



a game warden in the army. He and I patrol trout streams this afternoon and on our way over Mason Hill toward Hicks Run we spot a small herd of elk. Bryan makes a good stalk and gets some close-up pictures.

*April 14*—Opening day of trout season. I spend the day patrolling streams for WCO Hastings. Stan and I have a good working relationship, with the deputy game protectors and myself joining his force in the spring, while in the fall he and his officers patrol for Game Law violations. Quite frankly, I probably get the better of the deal. While a fish warden's job has remained mostly stocking and law enforcement, our duties have expanded to the point where there really is no "off season" for us. I could probably work 24 hours a day 365 days a year and still never accomplish every thing I would like to get done.

*April 15*—I work Fish Law enforcement during the day and attend another of deputy training seminars in the evening. The instructor is Patrolman Steve Skrzypek and the subject is vehicle stops.

*April 17*—I answer a bear complaint at the Louis Slyder residence. Mr. Slyder and his family are the only permanent residents on the Steam Mill Hunting and Fishing Club, a 5000-acre private club where virtually no bears have been harvested in years. Last year we caught three bears at the Slyder home.

*April 18*—I attend a special dinner meeting in the evening to honor this year's outstanding deputy game protector for the Northcentral Region. Each year every game protector has the opportunity to nominate one of his deputies for this award. Jean Smith, this year's nominee from Cameron County, and Lois Braden, assistant news editor for WLEM radio station, attend with me. I consider every one of my deputies worthy of the outstanding deputy award, but a few of the qualities which led me to nominate Officer Smith include a superior knowledge of the Game Law, ability to investigate violations, and a good job in the public relations field. Mrs. Smith was the first woman to be commissioned a deputy in the state and has been of great help to me in the training of new officers. Dorwin Taylor, a deputy of Game Protector Dick Curfman in Potter County, is chosen for this year's award and we all congratulate him on his accomplishment.



*April 19*—We have caught the bear at Mr. Slyder's and after checking the ear tags discover we trapped the same bruin there almost exactly a year ago. At that time we had relocated it to the extreme end of the county. Obviously, we must move it much farther this time.

*April 23*—Deputy Game Protector Bill Smith and I work Fish Law enforcement today.

*April 24*—I am preparing a newspaper article for the Cameron County Echo. The story compares and contrasts some of the more common methods used by wildlife managers to estimate populations of various game species.

*April 26*—While working Fish Law enforcement, I apprehend an individual who has caught his limit of trout, taken them back to camp, and then returned. He has killed two more fish when I interrupt him. The sour part of the story is that this is a grown man in his twenties who is fishing with his father who is probably in his fifties. His father also had taken a limit back to camp and returned, obviously intending to try to catch more. However, he had not done so at the time I approached him, so I was unable to charge him. The result was a strange situation. This man had been setting an example for his son for more than twenty years, but it was the son who had to pay the penalty today.

*April 29*—I am getting a headstart on my monthly reports today. In researching this column I found that an incredible 14 percent of my working time is spent in the office, either in front of the typewriter or on the phone.

THERE ARE good uses for sinkholes and there are bad uses for them. Jim McClure was showing me a bad one.

The sinkhole, in a Centre County field, was half-filled with tires, magazines, bottles, bedsprings, and dented steel drums. McClure stood on the lip of the sink, hands on his hips.

"There's something about a hole that makes people want to dump in it," he said. "You find all kinds of stuff in sinkholes. Cranekase oil, dead ealves, eleaning fluid, household garbage, you name it. Farmers are prime offenders. A farmer drives his traector to the sinkhole behind the barn, and hoses out his sprayer; the rinse water runs into the sink. Maybe he throws his empty pestieide containers in, too.

"He doesn't know how dangerous that is. A sinkhole is a drain in the land. Throw something into a sinkhole, and it goes straight into the groundwater. The farmer may end up drinking those pestieides right out of his well."

McClure, an art editor at Pennsylvania State University, is a founding member of the ClearWater Conservaney, a eitizens' group dedicated to protecting water resources in central Pennsylvania. On a sunny spring day, he took me on a sinkhole tour.

### Limestone Regions

Sinkholes pock the landscape from Massachusetts to Florida, into the Midwest, and in other parts of the eountry. In Pennsylvania they are most common in the limestone regions of the southeast, southcentral, and eentral counties. Sinkholes form when acid-bearing water — rain and run-off — dissolve bedrock, collapsing the soil above.

There are three main types.

A "eollapse sink"—the rarest of the three types—happens when a eavern roof collapses. The sinking can oecur over years, or swiftly, as when a farmer drives his tractor across a pasture and feels the ground give way. A collapse sink has steep walls often studded with exposed bedrock and perhaps with an opening to the underground ehamber.



"Solution sinks" occur where bedrock has slowly dissolved to form a depression. A solution sink may take thousands of years to form; it has gently sloping sides and may be fairly large, up to several hundred aeres. In Nit-tany Valley, where Penn State is located, long lines of solution sinks are strung out along the bases of the mountains. Streams disappear into some of the sinks, while others are dry.

The third type of sinkhole, and the most common, is a "soil-piping sink." It forms when water flushes soil particles down through craeks in the bedrock. A eavity develops between the bedrock and the ground's surface, spanned by an areh of soil that, as the water eats away at it, grows progressively thinner. It tends to eollapse abruptly, either on its own or under a weight.

McClure took me to a soil-piping sink in the town of State College. The sink was in a grassy swale half a mile from the house in which I grew up. It was an old sink, its limestone weathered and furred with moss, but I had never known about it, never given the tangle of brush more than a passing glance. In the hole, thirty feet across and five to ten feet deep, the air was cool and damp. An apple tree grew in the reddish soil, and around the depression were scrubby trees and banks of honeysuckle.

"This sink hasn't been abused too



badly," McClure said. "It gets some street run-off from the neighborhood up the hill, so the water that goes into it probably carries salt and motor oil, some heavy metals, and other road contaminants." McClure sat on a rock in the dappled shade. "It's a secret world in here. In a heavy rain, you can hear the gurgling and pulsing of water flowing into the sink, and into the underground stream that it connects to."

The State College area, he explained, is watered by invisible rivers. "I came here from the Midwest," he said. "In Illinois, streams wander all over the land; here there are valleys, dry, that look like they should have streams in them. The country's green, and it gets a lot of rain. So where are the streams? It turns out they're underground."

The underground streams interconnect, in ways not fully understood, with other, less-mobile, groundwater pools. Normally, surface water — rain run-off

and snowmelt — must trickle through the soil to join this subterranean network. In the soil, bacteria cleanse the water, breaking down impurities and toxins picked up on the surface. But when run-off goes into a sinkhole, it takes a direct route. "The word 'sink,'" McClure said, "as in 'kitchen sink,' is pretty darned apt. People tend to treat a sinkhole as if there's a garbage disposal down below, waiting to take the impurities out. A sinkhole doesn't work that way: It doesn't clean the water at all. It's a direct conduit to the groundwater."

Some of the water comes back up through wells and springs. Many springs in the region yield thousands of gallons per minute, issuing forth as complete streams or supplying town water supplies. Until the last several decades, when settlement in Centre County was sparse, the area's water remained pure and in ample abundance. Recently,



however, industries have spilled wastes into the groundwater, while burgeoning suburbs have demanded more and more water. Citizens like Jim McClure have started to worry. "We think it's important to understand how sinkholes function in a local groundwater system," McClure said. "People in local governments are only now stirring themselves to learn how development should proceed in a sinkhole-prone area."

McClure took me to a new development on the edge of State College, with neat lawns, two-car garages, and streets named Woodberry and Sleepy Hollow Drive. We parked next to a vacant lot, with the green metal boxes of a utility drop already in place. We stepped through tall grass to a slumping, dirt-filled depression twenty-five feet across and ten feet deep, with two trees tilted in the center.

"This is a soil-piping sink. It opened within the last year, and it's the type of sinkhole most affected by human activity. Look around—a road, driveways, a few dozen houses. Covering up that small amount of land has concentrated the run-off, changing the way water enters the soil. Instead of seeping in slowly, it's found a pipe into the groundwater."

### **Abound in State College**

In downtown State College, McClure told me, sinkholes abound. A parking lot occupies a partly filled-in sink near the business district; stormwater drains are routed into the sinkhole, depositing street pollutants. The high school football field occupies a large sink near the city post office, and it, too, receives street run-off. When State College built a sewer system some twenty years ago, an occasional home was found whose wastewater drained not into a septic tank but into a sinkhole. Somewhere—miles down the valley, perhaps—water from these urban sinkholes may surface in a well, a water supply, or a stream.

"Bellefonte, east of State College, gets its water from Big Spring," McClure

said. "Nobody knows exactly where the water comes from. Some of the locals say it travels all the way from Lake Erie. In fact, the water flows underground down Nittany Valley from the west—from the direction of State College."

McClure took me to a small industrial park, where he pointed out an example of good sinkhole management. A company, a manufacturer of school yearbooks, had not graded its site to an even slope; the characteristic rolling, dimpled look of limestone-underlain land showed clearly, covered by soil and grass. "If a potential sinkhole—one of those low-lying depressions—can be kept with a good layer of earth over it, the water going in will get some cleansing. And it will flow slowly enough, even after a heavy rain, that a soil-piping sink won't form."

An even better treatment, McClure said, is to let sinkholes and wet, low-lying spots grow up in brush. The soil beneath a potential soil-piping sink will be held together better by the deeper-rooted plants than by grass; infiltration will be gradual. "Most people like to see nice clipped lawns," McClure said, "but in this case, cluttered is better than neat."

We drove out into the country, passing new-plowed fields and pastures where black-and-white cows grazed; houses stood in clumps, or lined the winding road. McClure began pointing out sinkholes: a verdant island in a field; a brushy bulge in a fencerow; a pile of rocks and rusting metal and boards in a spot where two planes of land curved down and met.

Dumping in sinkholes can have quick and drastic results. The dead calf heaved into the sinkhole in the back 40 (or the empty fertilizer bags, the old refrigerator, or the '63 Dodge) can show up within hours, in the form of tainted water at the farmer's own tap—or at the hydrant that waters his cows, the neighbor's tap a mile down the road, the water supply for the village in the alley. Pollutants from rural sinks are often hard to trace, because the contaminants are so common. It is harder



still to prevent the pollution through ordinances and enforcement.

As we drove, I realized I had visited a lot of sinkholes over the years, not knowing what they were. I'd gone there to find songbirds, which nested in the trees and shrubs. I'd discovered deer holed up in the thick cover; rabbits and pheasants; groundhogs, foxes, and raccoons. In intensively farmed land, where fence rows are few, sinkholes may be the only places animals can find cover. To help wildlife, while simultaneously protecting water resources, people should let nature dominate. "The best policy toward rural sinkholes," McClure said, "is one of benign neglect."

We drove across the valley to Penn State's farm research center near Rock Springs. Every summer, the university hosts Ag Progress Days at the installation, attended by tens of thousands of rural Pennsylvanians. McClure crossed the fair's midway, coasted through some deep grass, and parked next to a copse of trees. Oaks and maples, they rimmed a sink. Limestone walls slanted steeply — into a jumble of paper and crockery and metal and plastic and rubber. Tire

tracks down a gentle bank showed where people came to dump.

"It wouldn't cost much to clean up this sink," McClure said. "We'd need some heavy equipment and a bunch of volunteers. We'd get rid of this junk, cart it to the dump, and let the dogwood and honeysuckle take over. Then we'd have the perfect teaching aid to show people how to care for their sinkholes."

"Cleaning up a sinkhole is just one small step toward improving the quality of our water and environment. But it's a tangible step, and it's cumulative."

**The Wingless Crow**

*The Wingless Crow* is a 200-page hardcover book made up of thirty-three of Chuck Fergus's "Thorn-apples" columns which have appeared in *GAME NEWS*. Wonderful reading for your own collection or as a gift. Order from the Game Commission, Dept. AR, Box 1567, Harrisburg, Pa. 17105-1567. \$10 delivered.

**State Endangered Species Book**

The Carnegie Museum of Natural History, with major funding from the Do Something Wild income tax checkoff program, has just published *Species of Special Concern in Pennsylvania*, an extensive book on the state's endangered plants and animals. This publication represents the efforts of the Pennsylvania Biological Survey, a group of professional and amateur naturalists assembled in 1979 to determine which of the state's flora and fauna are threatened to some extent with extinction here. It undoubtedly will be the authoritative guide for plant and nongame management and protection programs for many years to come.

Presented in this 430-page volume are detailed accounts covering 297 species of plants and animals the Survey considered to be imperiled. (More than 370 plants are listed, but accounts are given for only the 21 plants classified as endangered, the highest degree of threat.) Each account includes a description of the species, its range, habitat, the reasons for its classification, recommendations on how to save the species, and selected references. Supplementing the text are continental and state maps illustrating where the species exists and many photos. Chapters on aquatic and terrestrial habitats, physiographic provinces, and drainage patterns in Pennsylvania are especially helpful in placing the endangered species problem in perspective. Order from Publications Secretary, Carnegie Museum of Natural History, 4400 Forbes Ave., Pittsburgh, PA 15213. \$34.80, delivered.

# READING RANGE

By Keith C. Schuyler

**W**HEN Reading Archery Club scheduled the Eighth Annual Mid-Atlantic Indoor FITA II Tournament on March 15-17, there was much more behind this contest than just another target tourney. The Reading club indoor facilities are one of a relatively few indoor ranges in this country that measure up to the demanding standards of the Federation Internationale de Tir a l'Arc, the world target archery and field archery organization.

To get a closer view of this outstanding club, the only one in the Reading area of Berks County, my camera and I arranged to meet Skip Phillips at the second annual Eastern United States Indoor Tournament held November 9-11 last year. The third is scheduled for November 8-10 this year.

Skip, known only to his family on occasion as Robert, is the dynamo of the Reading club, and conducts the two big indoor shoots each year. However, "We have four Pennsylvania State Archery Association indoor tournaments in addition to outside shoots on the field course. Our cottontail field course is considered one of the most challenging outside ranges in the state."

## Deer Taken Annually

Located south of Reading in Cumru Township near the town of Mohnton, the 34-acre property of the club is bordered on three sides by Nolte State Park Game Propagation Area. Only members are permitted to hunt within the club's perimeter, but every year deer are shot there during the bow hunting season.

The clubhouse itself is a spacious building that houses the 16-lane indoor

range as well as a large kitchen area and indoor comfort facilities. All members, 134 at last count, are also affiliated with either National Archery Association or Pennsylvania State Archery Association. Membership is not sufficient to finance the considerable expense of operation, but the many indoor, as well as outdoor, invitational tournaments provide sufficient income.

As Skip explains it, "About 95 percent of the membership is bow hunter oriented, but we try to provide a total spectrum of archery activities. We have crossbow people, target archers, Olympic style shooters, bow hunters, and those who come strictly for recreation and physical exercise."

Reading Archery Club was started in 1941 and is incorporated as a non-profit organization. The indoor range was added to the original clubhouse in 1976, and interest expanded from field shooting to target archery and provided a year around program. Over the years it has produced some outstanding archers.

Two members, Rit Heller and John Ianuzzo, hold high rankings in Pope and Young Club by virtue of a number of outstanding game trophies each has taken with the bow. Rit has a number of impressive trophies from various states and Canada, but two of his high scoring ones are white-tailed deer heads that came from near his home in Reading. One held second place in Pennsylvania's state records for a number of years.

Steve Lieberman, mentioned here last month as a protege of Sherwood Schoch, has retained both his membership in the Reading club as well as his amateur status despite a world field



championship at Wales in 1970, and Germany, 1973. He was also the first person in the United States to be a member of the World Field as well as the World Target Championship teams in the same year. Among many national and forty international awards is included two wins in the Challenge Benedictine in France. He also served on the protocol committee at the 1984 Olympic archery games in Los Angeles.

Darwin Kyle, Altoona, who assisted Skip at the November tournament and with information here, gave me a run-down on the host for the "Star" tournaments held at Reading. Kyle, with Lieberman and Rod Hoover, composed the tournament technical commission.

### International Status

Skip, who hails from Shillington, holds international archery status in his own right. He was director "for the shooting of archery" at the Olympics. He is also a national judge and an international judge candidate. "A capable person, and a good organizer. Any tournament that he has anything to do with is well run; people recognize this fact and will attend for this reason." The fact that there were 222 registered for the November shoot, second highest of any NAA sanctioned tournament, is evidence of archer confidence. Only the National Indoor Archery Tournament has a greater attendance.

Election is held this month at the Reading club where being an officer is tantamount to holding a second job. Officers for the 1984-85 year were: President, Tom Mountz; Vice-president, Bernie Soltysik; Treasurer, Skip Phillips; Secretary, Steve Smith. Trustees: Paul Rowland, Larry Haas, and Larry Skillman.

In leaning on Darwin Kyle for fill-in information on significance of a Star tournament, a better source would be difficult to find. Kyle traveled 15,000 miles last year to spend six weeks coaching an archery team at Bhutan, a tiny country north of India, to provide an entry for the XXIII Olympiad in Los Angeles. There will be more here later

on Kyle and his gold medal sons, perhaps the outstanding archery family in the United States.

Any indoor archery tournament with a Star listing must meet the most exacting requirements of FITA, and consequently of the National Archery Association which subscribes to all conditions of the international body. Reasoning behind all this, aside from guaranteeing a top tournament logistically, is to provide that any world record shot will be officially acknowledged as such.

For a starter, the tournament must be registered with both NAA and FITA. Star fees must be paid to FITA through NAA. Distances must be exact. And there must be so many lumens of light positioned upon official target faces.

In the Eastern Indoor, shooting distance is exactly 18 meters at a 40-centimeter target. The distance is approximately equivalent to 19 yards and 2 feet. The 10 scoring ring is about 1 $\frac{3}{4}$  inches in diameter. This is known as the *short* U.S. indoor distance.

The November shoot was registered as a Double FITA, with 60 arrows at the distance with a possible score of 600.

**SKIP PHILLIPS, front, international judge candidate and Olympiad official in 1984, hosts FITA tournaments at Reading. With him is Darwin Kyle, Altoona, who coached Bhutan team for Olympics.**





**OVERALL VIEW** of Reading Archery Club's indoor range during Eastern U.S. Indoor Championship Tournament.

The 8th Mid-Atlantic, shot last month, was a FITA II, or a *long* FITA, shot at 25 meters using a 60-centimeter face. Although in each tournament the *round* is 60 arrows, it is usually shot in two halves. With alternating lines, 16 shooters to a line, 32 archers can be accommodated at one time in the Reading facility.

At any tournament, schedule permitting, an archer may shoot the contest twice, but only the first may count for an official score. Even with one line on Friday and three shooting times on Saturday and Sunday, there were no openings for anyone to duplicate the tourney last November.

Basic requirement for these tournaments is membership in NAA. All classes are recognized from youngsters to adults, and winners are recognized as Eastern United States champions, male and female. All, however, must shoot under identical regulations. For example, Jerry Pylypchuk set a new record for men with a 572, but Mike Kyle shot a 573 as an intermediate for a new record in his class and the highest score for the three-day tournament. Of course, many new records were established for this shoot in its second year of existence.

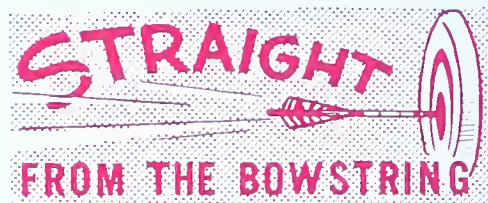
A special section was created for college teams and individuals. For years a

college tournament was held at East Stroudsburg State College by Dr. Maryanne Schumm. A lessening of interest and financial problems at the college level have discouraged this tournament over the state, and the slack has been picked up by Reading with this special collegiate section in the November tournament.

Increasing interest in the Eastern necessitated moving the crossbow section to Saturday, a week before the main tournament, to accommodate all archers. Previously, crossbow archers shot after regular shooting on Saturday, but shooting ran past midnight to make it rough on those conducting the shoot, with the first line coming up on Sunday at 9:00 a.m.

Whites are the dress code for these tournaments. All tackle is inspected—arrows, finger tabs, sight, bow, string—to make certain that it conforms to regulations.

In this program, Cadets, male and female, are from the youngest age at





which a bow can be handled to age 12. Juniors are from 12 to 15 years; Intermediates are from the 15th birthday to the 18th birthday. After 18, an archer is considered to be an adult and must compete against all comers.

If you can qualify to shoot at the big ones held by Reading Archery Club, you can contact Skip Phillips at 628 Fritztown Road, Shillington, PA 19607, or telephone 215-777-6306, for further information. Meanwhile, here are top three 1984 Eastern Indoor scores, as applicable.

Asterisk (\*) indicates new Eastern U.S. Indoor Record.

**Amateur Men**

- \*1. Jerry Pylypchuk ..... 572
- 2. Ted Light ..... 558
- 3. Mario Patlingrao ..... 554

**Intermediate Men**

- \*1. Mike Kyle ..... 573
- 2. Scott Schroeder ..... 541
- 3. Michael Ganor ..... 537

**Cadet Men**

- \*1. Tom Kyle ..... 451
- 2. Mike D. Francesca ..... 356
- 3. Gary Chernich ..... 224

**Junior Men**

- \*1. Corry Gerhart ..... 550
- 2. Jimmy Whitesell ..... 544
- 3. Robert Gall Jr. .... 534

**Pro Men**

- \*1. Jim Bashwiner ..... 556
- \*2. Al Lizzio ..... 556
- 3. Vince Price ..... 411

**Crossbow Men**

- 1. Charles Sacco ..... 598
- 2. Erv Myers ..... 597
- 3. Ray Stauffer ..... 596

**Amateur Ladies**

- \*1. Eileen Pylypchuk ..... 557
- 2. Linda Callahan ..... 553
- 3. Melanie Skillman ..... 550

**Intermediate Ladies**

- 1. Angie Nusz ..... 498
- 2. Kris Maskrey ..... 496
- 3. Lisa Heimbach ..... 485

**Cadet Ladies**

- \*1. Heather Preston ..... 480
- 2. Keri Rodriguez ..... 469

**Junior Ladies**

- 1. Barb Gulentz ..... 478
- 2. Joanne Lewczak ..... 452
- 3. Christina Preston ..... 427

**Crossbow Ladies**

- \*1. Carol Pelosi ..... 593
- 2. Lillie Stauffer ..... 574

**Colleges Attending**

- Barnard/Columbia (B/C)
- Trenton State College (TSC)
- Queensboro (Q)
- Oswego State (OS)
- Millersville University (MU)
- Lehman College (LC)
- Stevens Institute of Technology (SIT)
- James Madison University (JMU)
- University of District of Columbia (UDC)

**College Men**

- \*1. Jim Becker M.U. .... 548
- 2. John Dryzga S.I.T. .... 541
- 3. Wil Kauffman T.S.C. .... 527

**College Ladies**

- 1. Cindy Little J.M.U. .... 502
- 2. Deki Choden B.C. .... 484
- 3. Kathy Doviak B.C. .... 483

**College Teams Men**

- \*1. Stevens Institute of Technology ..... 1499
- 2. Lehman College ..... 1222

**Ladies**

- \*1. Barnard/Columbia No. 1 ..... 1435
- 2. Barnard/Columbia No. 2 ..... 1245
- 3. Lehman College ..... 1160

CHARLES SACCO was named 1984 Eastern U.S. crossbow champion at tournament held before recurve bow event.



**Mixed**

- \*1. Stevens Institute  
of Technology ..... 1447
- 2. Lehman College ..... 1306

**Amateur Teams**

- \*1. Wo-Pe-Na ..... 2209
- 2. Reading Archers ..... 2196
- 3. Bloomfield Archers ..... 2177

In the future, the fall tournament will be known simply as FITA East. The existing Eastern U.S. Indoor records will be carried over to all future tournaments designated as FITA East. Sponsor for the November, 1984, tournament was Kinsey Archery Products, Inc.

**GAME NEWS**

Enclosed find check or money order for \$..... for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW      ☐ RENEWAL      \_\_\_\_\_  
(Check One)      ACCOUNT NUMBER

In U.S. ☐ 3 Years \$16.50      ☐ 1 Year \$6.00  
To Canada and all foreign countries  
☐ \$7.00 per year in U.S. Currency

GAME NEWS Binder (Holds Twelve Issues of the Magazine)  
☐ \$3.50

Name .....  
(print plainly)  
Address .....  
City ..... State .....  
(Zip Code)

NOTE: All remittances should be made payable to the  
PENNSYLVANIA GAME COMMISSION  
Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
DO NOT SEND CASH  
Please allow 60 days for first copy.

**NHF Day - September 28, 1985**



**the National Hunting and Fishing Day**  
October 17-19, 1985 (Oct 17-19, 1985)  
Enter your club or a club ..... Company  
Amount of check \$5.00  
I will receive your money back ..... one to one  
For to send  
I will send you a check or money order for \$  
.....  
.....  
.....  
.....



# SOME THOUGHTS ON BULLETS



**T**HE FIRST STRONG rays of early sunlight were erasing the morning darkness when the shadowy figure of a deer appeared a 150 yards below. I was behind a large hemlock on the very edge of a high ridge. I smiled inwardly at my good fortune on having a deer within shooting distance only a few moments after it was legal to shoot on the first morning of the 1984 antlerless season. It would all be over in a minute. Or so I thought.

The deer was in thick brush, angling in my direction. I made no attempt to shoot or even aim, for it wouldn't be in the open for another 50 yards. I had stayed pretty well concealed, taking only quick glances around the tree to keep track of the deer's movements. When I saw an opening only a few yards in front of the deer, I picked up the deer in my scope. It was a wide open shot, but all I could do was lower the rifle and watch. It had a rack!

As the moments flew by, I grumbled to myself about the bad luck of not seeing even a spike in buck season, and now being confronted with a better-than-average rack first thing in antlerless season. However, many seasons spent in search of the wily whitetail had taught me to be patient. When two

shots rang out from Helen's direction, my spirits brightened.

After what seemed a full minute, a single shot rang out. Seconds later, I saw flashes from Helen's camo-blaze orange outfit as she moved through the woods 400 yards away. Another thirty seconds went by, and then a long blast from her whistle told me she had scored.

By the time I reached her, she had tagged the deer and was working on removing the musks glands on the rear legs.

"I missed two running shots, but this deer split from the herd and stopped. I shot it through the ribcage. It piled up immediately, but then took off like it was never touched. Look what the bullet did and tell me what went wrong."

## Just Behind Shoulder

I'll spare the details, but the bullet had impacted just behind the right shoulder and exited in front of the left shoulder. The 117-grain Federal Hi-Shock Spire Point bullet had really done a job. I found it hard to believe the deer had run for 60 yards after being hit.

First off, many big caliber hunters will say the 117-grain 257 bullet is too light for deer. They will also probably

**By Don Lewis**

Photos by Helen Lewis



**DON LEWIS** examines a rifle bullet he's just retrieved from his testing box. A sand/sawdust mixture is used to catch test bullets so they can be studied and preserved for future comparisons.

say if a heavier bullet or larger caliber bullet had been used, the deer would have been killed instantly. I don't agree with either of these philosophies, although I certainly am not opposed to other conventional cartridges for whitetail hunting. I do draw the line on the 224 bullet for whitetail, but, since tougher 243 bullets are available, any cartridge from the 6mm's up with the proper bullet is adequate.

Too many hunters give little or no thought to the bullet. When they do, they often make the mistake of going for the heaviest bullet. While the emphasis today is more on cartridge size than the makeup and weight of the bullet, the truth is the big game hunter should be very selective about the bullet needed for his hunting requirements. The reliable 30-06 will easily handle the 180- and 220-grain bullets, but these heavier bullets are not the best choice in that caliber for whitetail hunting. I believe the deer hunter will ultimately have more success with bullets in the 125- to 150-grain class.

The story is quite different for the elk or moose hunter. On these larger animals, heavier bullets are needed for deep penetration. On top of that, bullets designed for super-large game must be constructed in such a manner that they don't come apart on impact, but retain much of their original weight. However, going to the heaviest bullet is not a sure guarantee the bullet will expand uniformly and stay in one piece after impact. For deep penetration, a good portion of the lead core must stay inside the jacket. This is of little consequence on a ribcage or neck shot, but not all shots are what can be termed as "ideal."

On animals the size of whitetail deer or antelope, what I term "middle class" bullet weights are more efficient than heavier slugs. I have taken several deer with the Speer 130-grain 308 slug, and I dropped a doe in the 1984 season with a Remington 150-grain Core-Lokt pointed soft point. Remington says this particular type of bullet is designed for medium and big game at long ranges. Its pointed profile gives flat trajectory, which pays off in excellent retained velocity and striking energy. A specially constructed jacket results in good penetration and controlled expansion without bullet breakup.

### **More than Weight**

I think it's apparent to even the novice big game hunter that there is more to a bullet than just its weight. Bullets are designed for specific purposes. The hunter who is selective about his bullets will increase his chances for success. Let's take a look at the general makeup of the bullet.

The bullet's makeup puts it into one of three classes: non-expanding, expanding, and fragmenting.

The non-expanding bullet is of little value in Pennsylvania's deer and bear woods. It normally has a full metal jacket covering the entire hardened lead core except the base. Old-timers refer to the non-expanding bullet as "full patched." I have heard it called "full-mantled," too. No matter what it is





**CARDBOARD PARTITIONS** help shooter find bullets in test box. Below, an unfired 150-gr. 308 bullet flanked by two others which have been recovered. Note how jackets have rolled back and the front portions of cores are missing.

called, it is designed so it will not expand when it hits its target.

The military has used non-expanding bullets for years. The design is considered more humane on humans, as it doesn't expand to create a large wound channel. African hunters use it on thick-skinned game animals such as elephants and buffalo. It's interesting to note that this type of bullet can also be used with good success in varmint caliber cartridges. Sierra, Hornady and Speer offer full metal jacketed bullets in both the 224 and 6mm calibers. These bullets should not be used for crows, foxes or chucks, but they are ideal for the turkey hunter in low velocity loads.

With the expanding bullet, the jacket peels back allowing the lead nose to enlarge. A good percentage of the nose is chewed away as the bullet moves through the target. In a sense, these torn-off particles of both the lead nose and copper jacket act as secondary missiles, creating a greater wound volume.

The fragmenting bullet usually falls into the varmint-type class. Driven at high speeds, the fragile bullet can literally go to pieces on contact. This type of bullet is very destructive on small non-edible animals. Any wood-chuck hunter knows the destructive potential of thin jacketed bullets in the 40/60-grain weight class. Since they do disintegrate on impact with targets of little resistance, they are not suitable for



big game. I have killed deer with a 45-grain bullet in the Hornet cartridge, a 50-grain slug in a 222 case, and a 52-grain match bullet in the 220 Swift cartridge, but I can't recommend them for regular use. Two kills were instantaneous from spine and neck hits, but the lightweight 45-grain Hornet bullet in the ham failed to penetrate through the hip joint, creating a superficial wound and a long tracking job. It's reasonable to assume any caliber from 6mm up using bullets weighing 100 grains or more would have been more effective.

I get some mail extolling the virtues of the 224 slug and some of the lightweight 6mm bullets as big game stoppers, but my range tests never convinced me these bullets were adequate for all types of deer and bear hunting. I'm very much aware that practically any weight bullet hitting the chest, ribcage, spine or neck will penetrate sufficiently to stop a whitetail. But conditions must be just right when that type of bullet is used. The lightweight bullet is very susceptible to even small obstacles in its



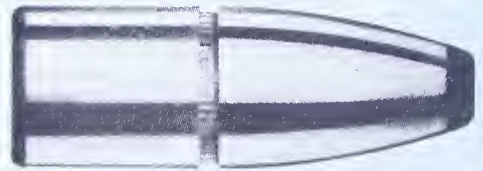
**THERE ARE OBVIOUS design differences between 55-gr. HP bullets in Federal's 223 ammo, above, and Speer's 220-gr. 35-caliber bullet, right. Each is designed for specific—different—purpose.**

path. I have never believed the lightweight 224 slug traveling at high velocity will blow to pieces if it hits just a blade of grass, but the Pennsylvania deer or bear hunter often needs at least reasonable penetration, so should stay clear of varmint-type bullets.

For decades, deer and bear shooters have argued the pros and cons of expanding-type bullets. I won't try to name all the types that are used for big game, but the list includes the Bronze Point, Silvertip, Core-Lokt and a host of others. Many Keystone hunters won't step in the woods without one or the other of these favorites. I am asked many times each year which bullet is best. To be honest, I don't know. Those which have been around for years have lasted because they work. I have no particular favorites. I'm still convinced the placement shot with a bullet of adequate weight far outweighs the type of bullet used.

The expanding bullet is primarily designed for medium-size or thin-skinned game. The heart of its design is to have a soft nose that will expand or roll back uniformly, creating an ever-widening wound channel as the bullet

**35Cal. 220 Gr. FN**



travels through the animal. The problem with this bullet from a designer's viewpoint is to control the rate of expansion. This becomes very complex because rate of expansion hinges a good bit on impact velocity and the muscle and skeletal makeup of the target. A bullet designed primarily for Alaskan brown bear would hardly give the same rate of expansion on a 200-pound black bear. The physical makeup of these animals, though both are bears, is far from identical.

As mentioned, it's essential to have the rear portion of the bullet remain intact for penetration purposes. Bullet makers solve this knotty problem in various ways. Some "lock" the rear portion to the heel of the jacket. Others use harder lead in the rear, or put a deep cannelure around the bullet for crimping purposes and also to help hold the rear portion of lead in the jacket. Nosler makes their famous partition-type bullet.

### **Variety of Ways**

There are a variety of ways to make a bullet expand. Exposing the soft lead core at the tip is common and dates back quite a ways. Thinning the jacket at the front or cutting it longitudinally definitely weakens the nose of the bullet. Of course, most of us are familiar with the hollow point bullet. In the money-starved Depression era, most 22 rimfire chuck hunters in my area were willing to pay fifteen or twenty cents more per box for the advantages offered by the expanding qualities of the hollow point bullet.

The old 35 caliber may never make centerstage again, but it isn't dead by





a long shot, and that's not a pun, either. Speer recently reintroduced the 358-caliber 220-grain flat nose bullet that they had discontinued in 1975. It didn't do well back then and was dropped from production. However, with a growing interest in the 357 Herrett that hit the scene several years back, along with the more recent introductions of the 356 Winchester and 357 Maximum cartridges, the big bullet is getting a second chance. The new version has the configuration of the original and inside flutes in the forward part of the jacket for controlled expansion. This bullet is also well suited for big game loads in the 35 Remington and 358 Winchester. Its flat nose makes it safe for use in rifles with tubular magazines. It can also be used with good success as a lighter bullet in the 358 Norma, 350 Remington Magnum, and other large capacity 35-caliber hunting rifles like the 35 Whelen.

In 1983, Federal added a 55-grain hollow-point boattail bullet for the popular 223 line. The ballistics of this new factory load essentially duplicate that of the military M193 ball round. According to Federal's ballistic data, muzzle velocity is 3240 fps with 1280 foot pounds of energy. Out at 100 yards, velocity is still 2880 and energy is just over the 1000-pound mark. At 300 yards, velocity is still a swift 2240 fps, which isn't bad for a 55-grain slug.

The boattail of the bullet greatly reduces drag, which results in higher retained velocity, greater striking power, flatter trajectory, and less wind drift than comparable flat base bullets.

The hollow point gives the varmint two distinct advantages. First, the hollow tip allows the lead unobstructed flow when the bullet engages the rifling without affecting its exterior aerodynamic shape, and that means better accuracy. Secondly, the hollow point initiates rapid jacket expansion at the target for maximum energy dispersion.

It's true that any bullet is better than no bullet in an emergency. Yet the hunter who gives careful thought to how he hunts and where he hunts and chooses a bullet accordingly, will ultimately be more successful.

---

## GUNnews for Shooters...

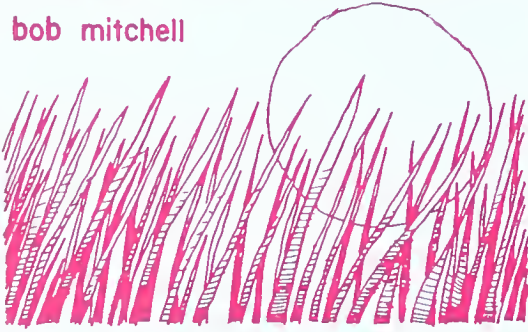
"Gun Guardian" is a tough flexible plastic safety strap and T-block that can be installed in most firearm actions to make it difficult to load them (as by curious children), yet permit quick activation if necessary. More a gun-use deterrent than gun lock, it is removed by scissors, fingernail clipper, or twisting a metal ring which is part of the package. (Hoppe's, Penguin Industries, Airport Industrial Mall, Coatesville, Pa. 19320.)

Federal Cartridge has developed a new low-recoil target shotshell, the "Extra-Lite." The 12-gauge shell is loaded with 1 or 1 1/8 oz. of No. 8 or 8 1/2 extra-hard shot. A special powder and slightly reduced velocity lowers "kick" to a level similar to that of the 1 oz. loads which have become popular with trapshooters.

A pair of new 2 3/4-inch Super-X steel shot loads for waterfowl hunters have been announced by Winchester, one each in 12 and 20 gauge. In 12 gauge, 1 1/8 oz. of No. 1, 2, 4 and 6 shot are available; in 20 gauge, No. 4 and 6 shot are offered in 3/4 oz. loads. The maker says a combination of soft steel shot and a high-density, thick-walled plastic wad provides maximum protection for all shotgun barrels.

# *In the wind*

bob mitchell



The Wyoming Game and Fish Department has begun an extensive 6-year vaccination program to control brucellosis in elk. Brucellosis is a disease introduced to the state from domestic cattle in the 1900s. It affects elk on 9 of 24 traditional winter feeding areas, and it causes at least 50 percent of the infected cows to abort their first calves. Most cows, however, produce calves in subsequent years. In some instances officials hope to vaccinate the elk by using a "bio bullet" fired from an air gun. After the bio bullet penetrates the animal's hide it dissolves, releasing the vaccine.

A dozen fishers were released in British Columbia's North Coast area in an experiment to see if they can help reduce porcupine damage to regenerating trees. Fishers, which are closely related to mink and weasels, are one of the few predators quick enough to flip a porcupine and attack its unprotected belly. Radio transmitters were implanted in each of the fishers, enabling researchers to track their movements for nine months. If this experiment proves feasible, fisher stockings could become a standard practice up there.

A North Carolina man, apprehended because a witness reported the incident through the state's Wildlife Watch Hotline, was assessed almost \$2000 in fines and penalties for killing a female black bear. The defendant was assessed \$500 in fines, \$35 in court costs, \$1035 in wildlife replacement costs, and \$300 to cover the costs of raising the killed bear's two cubs. He also had to forfeit his hunting license and shotgun, was placed on probation for two years, and is not permitted to hunt or fish in North Carolina for two years.

North Carolina's Wildlife Endowment Fund went over the \$3 million mark last August. The fund is supported by the sale of lifetime hunting and fishing licenses, lifetime subscriptions to their wildlife magazine, and direct contributions. Only the interest from the fund is spent. This year this income is going to help finance a youth coordinator position, a youth fishing program, and the production of television and motion picture programs promoting wildlife conservation.

The first elk season in Michigan in 19 years was held last December, and 49 elk were taken by the 50 permit holders (the 50th was unable to hunt the entire 6-day season due to a family illness). The largest taken was a 13-pointer that weighed 632 pounds field-dressed. The hunters had been randomly selected from 49,508 applicants. Of the 50 selected, 10 were permitted to shoot bulls; the remaining 40 were required to shoot only cows or calves. Officials are pleased that the hunt went so smoothly, and are predicting such a hunt will become an annual event.

Using funds from their income tax checkoff program, the New York Department of Environmental Conservation has established a Nest Box Network. Through this program, which is similar to the one launched by the Pennsylvania Game Commission last year, citizens who actively work with cavity nesting wildlife will help the agency monitor the status of bluebirds and other cavity users, and get them established in new areas with suitable habitat.

**The Nebraska Wildlife Federation is going to develop demonstration plots on seven roadside areas they are leasing from the state to show the public how wildlife can be managed on small properties. The plots, which range in size from three to 52 acres, will be developed and managed by student groups and conservation clubs.**

Good news and bad news concerning hunting accidents in Virginia: Although there was almost a 50 percent reduction in the number of hunting accidents last year compared to the preceeding, the number of fatalities jumped from six to nine. In eight of the nine fatalities, the victims were mistaken for game. None of the nine victims was wearing any fluorescent orange.





## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. If you are not sure of which maps you want, write for a PGC map order form.



## **Voluntary Waterfowl Stamp No. 3**

Pennsylvania's 1985 waterfowl management stamp, created by Ned Smith, is the third such stamp offered by the Game Commission to provide waterfowl enthusiasts and stamp collectors an opportunity to help protect and manage waterfowl in the state. Funds derived from these sales are used for waterfowl habitat acquisition and development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Available at the Game Commission's Harrisburg office, regional offices, the Pymatuning and Middle Creek Wildlife Management Areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints are available from art dealers and galleries nationwide. Collectors note: The agency's first stamp, issued in 1983, featuring a pair of wood ducks, will be available only until December 31, 1985, at which time remaining supplies will be destroyed.





# PENNSYLVANIA GAME NEWS

MAY 1985

60 CENTS



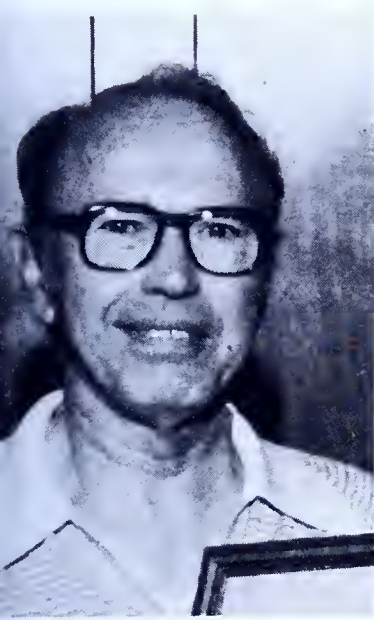
## **Voluntary Waterfowl Stamp No. 3**

Pennsylvania's 1985 waterfowl management stamp, created by Ned Smith, is the third such stamp offered by the Game Commission to provide waterfowl enthusiasts and stamp collectors an opportunity to help protect and manage waterfowl in the state. Funds derived from these sales are used for waterfowl habitat acquisition and development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Available at the Game Commission's Harrisburg office, regional offices, the Pymatuning and Middle Creek Wildlife Management Areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints are available from art dealers and galleries nationwide. Collectors note: The agency's first stamp, issued in 1983, featuring a pair of wood ducks, will be available only until December 31, 1985, at which time remaining supplies will be destroyed.



# Ned Smith

1919 - 1985



Ned Smith

NED SMITH is dead.

That's the hardest sentence I ever had to write. We all have friends who are important to us, but some are special. The reasons are sometimes hard to explain, maybe even impossible. That doesn't matter, it's just the way it is.

Our friendship went back so far I can't say precisely when it started. Ned illustrated the first story I wrote for GAME NEWS, in 1949, and his relationship with the magazine was close through most of his life; in fact, he was editor in the early 1950s. We were in constant touch during my years here. He did far more cover paintings for us than any other artist and, with no disrespect to anyone else, no one ever created better wildlife art. Not only for GAME NEWS. His work is on permanent display at Carnegie Mellon Museum in Pittsburgh; he had a one-man show at the American Museum of Natural History in New York City; he illustrated for National Geographic Magazine and National Audubon Society, and

for countless sporting, hunting and outdoor magazines throughout the country. Firearms and hunting books he illustrated for Samworth Publishing Co. of Georgetown, S.C., have become collector's items, and he illustrated a college textbook on ecology and field biology. He received numerous honors for his work. His reputation was, and is, international.

Yet Ned would take time from an incredibly demanding work load to encourage a struggling youngster who dreamed of becoming a wildlife artist, perhaps remembering the long early years when he worked and studied on his own, with no real help except the constant encouragement of his parents and his wonderful wife Marie. Ned was a self-taught artist, naturalist, botanist, biologist, writer—his book *Gone for the Day* has been selling steadily since 1971—a photographer who took tens of thousands of outstanding color slides which he used as references and to verify the accuracy of his painting. He took his God-given talent and through never-ending study and work refined it to a level that was truly awesome.

Yet when I think of Ned, it's always on a personal level. He was intensely efficient, but an unassuming man who smiled often and laughed a lot. He was hard to anger yet had a temper. I remember how Jim Bashline and I once needled him about the deficiencies of his old L. C. Smith until he erupted and gave us a long technical dissertation on the qualities of his pet grouse shooter. I remember how understanding and kind he was when I argued that the ringneck was a greater gamebird than the grouse, and how gently he pointed out that I was wrong. I remember how he laughed and joked and told stories for hours when we drove to deer camp in my old Jeep. . . .

And now Ned is gone. But he left unforgettable memories for many of us and truly great paintings for everyone. Few can leave so much. God willing, our trails will cross again.—*Bob Bell.*

**Richard L. Thornburgh**  
Governor

#### COMMISSION MEMBERS

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doeblar, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

#### EXECUTIVE OFFICE

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starnier**  
Comptroller

#### BUREAU DIRECTORS

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

#### GAME NEWS

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**GAME COMMISSION**  
(717) 787-4250

## FEATURES

<b>The 17-Year Cieada — Methuselah of the Insect World</b> .....	3
By Nick Kerlin	
<b>A Tempting Season</b> .....	6
By Shirley Crenoble	
<b>Search — The New Teehnology in Pennsylvania</b> .....	11
By Sebastian Marinaro and Ken Boyles	
<b>The Indian Eye Test</b> .....	15
By Joel Littell	
<b>Those Ineredible, Gullible Spring Gobblers</b> .....	16
By George L. Harting	
<b>Beaks to Bills</b> .....	20
By Bob Cubbins	
<b>Ginseng in Pennsylvania</b> .....	25
By Kim D. Pritts	
<b>This Dog's Gettin' Older</b> .....	28
By Nick Sisley	

## NEWS

<b>Field Notes</b> .....	34
<b>Conservation News</b> .....	39
By Ted Codshall	
<b>In the Wind</b> .....	64
By Bob Mitchell	

## COLUMNS

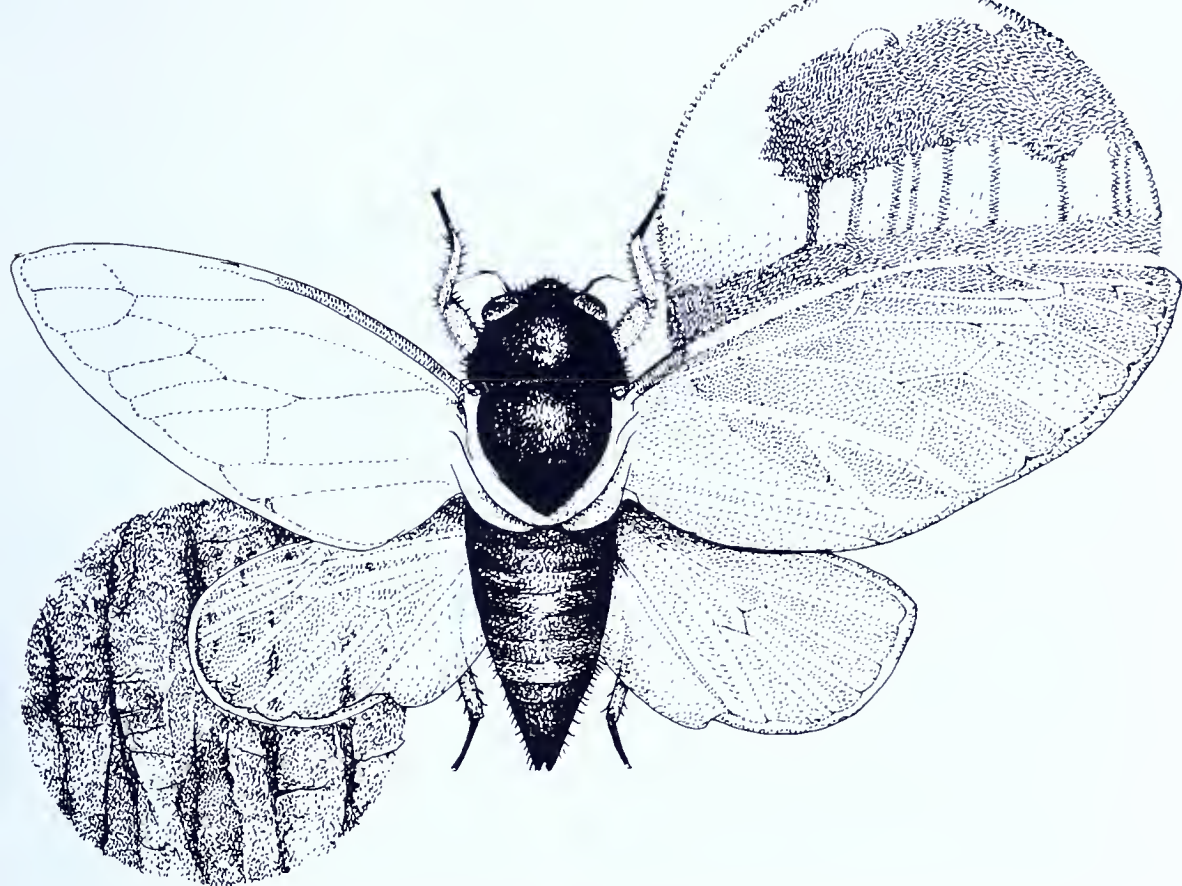
<b>GAMEeoking Tips</b> .....	27
By Carol Vance Wary	
<b>Young Artists Page</b> .....	46
<b>Outdoor Wildlife Learning</b> .....	47
By Bill Einsig	
<b>DGP Diary</b> .....	49
By Joe Carlos	
<b>Thornapples</b> .....	51
By Chuck Fergus	
<b>Top Taekle Test (Arehery)</b> .....	55
By Keith C. Schuyler	
<b>The Varmint Rifle . . . Past and Present (Guns)</b> .....	59
By Don Lewis	

**COVER PHOTOGRAPH BY SCOTT WEIDENSAUL**  
(Cover Story page 48)

PENNSYLVANIA GAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Second-class postage paid at Harrisburg, Pa. CHANGE OF ADDRESS: POSTMASTER: Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1985 by the Pennsylvania Game Commission. All rights reserved.

*NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.*





**THIS YEAR** as many as one million cicadas per acre will tunnel from secure homes several feet below the ground to complete a 17-year life cycle, one of nature's most incredible life history dramas.

# **The 17-Year Cicada**

## **METHUSELAH OF THE INSECT WORLD**

**By Nick Kerlin**

**“T**HERE WAS a numerous company of flies, which were like for bigness unto wasps or bumblebees, they came out of little holes in the ground, and did eat up the green things and made such constant yelling noise as made all the woods ring of them, and ready to deaf the hearers.”

So were such creatures described by one observer in 1633. They have returned every seventeen years since then, along with similar misconceptions and less than keen observational skills by people of succeeding years.

They are returning again this May, as many as one million per acre.

The 17-year cicadas are back.

Having last seen the light of day as newly hatched gnat-size larvae in 1968, then spending the next 17 years underground, they will emerge as adults for a brief 30 days to complete one of nature's most incredible life history dramas.

Seventeen broods of this periodical cicada are recognized by scientists and designated with Roman numerals. Brood VIII is the one that will be occurring from mid-May through early July in western Pennsylvania, northern West Virginia and eastern Ohio.

Some yet to be understood force

beckons them to tunnel to the surface from their secure home several feet beneath the ground, having spent their time sucking sap from tree roots with straw-like mouthparts. Yet despite their long larval stage, utilizing as many as 30 molts, they will not immediately break forth. Instead they will wait until the evening hours, sometimes constructing small tunnel chimneys that extend several inches above the ground.

Finally crawling forth, as many as two dozen per square foot of ground, they will climb several feet upward on tree trunks, fenceposts, even blades of grass for the final transformation to adult. After attaching themselves firmly with their hook-like front legs, the skin of their larval shell splits down the back. Within an hour the ghostly ivory-white body emerges. It has two bright red eyes with black spots behind. It will be several hours before the wings fully open and harden. During this time the body changes to black with orange legs and red eyes for the 1½-inch adult. Certainly quite different in appearance from the green and much larger annual cicada or harvest fly we see in July.

Although few people will be on hand for the night emergence, none will be able to ignore the males' loud calling in the next few days. Said to be the loudest of all insect sounds, the buzzing *f-a-r-r-o* can be heard for nearly a mile.

### Only Males Sing

Only the males sing; the females have no sound producing organs. Four different calls have been determined: calling by individuals in mass to assemble males and females; two different courtship calls when near a female; and a disturbance squawk when a cicada is captured or disturbed in flight.

"Musician" might better describe the male cicadas than "singers," since they utilize not vocal chords but an elaborate system of sound chambers and resonators found on the abdomen beneath the wings.

A stretched membrane along the outer portion of this body cavity is



**CICADAS form an abundant food source for every opportunist in the wildlife kingdom. From chipmunk to red-tailed hawk and from brook trout to wild turkey, all enjoy a bonanza feast.**

vibrated 200 to 400 times per second by muscular activity to produce the sound. The method is similar to popping an aluminum pie plate back and forth with thumbs. Cicadas control sound volume by raising and lowering the abdominal flap coverings.

Like grasshoppers, crickets and most moths, cicadas hear quite well. Tympanic organs on the lower surface at the base of the abdomen function similarly to the human ear.

A French scientist of the 1800s once believed that cicadas, despite their noisemaking capabilities, could not hear a note. He performed a variety of experiments to "prove" the theory, culminating by firing two salutes from a fully loaded cannon near a group of the insects. The cicadas exhibited no change, and he therefore assumed they were deaf.

Researchers now know that insects respond to sound frequencies different from those detected by the human ear.



Besides, after waiting 17 years for the right serenade, why pay any attention to a cannonade?

After mating, the female will choose any of 80 different trees or shrubs—oaks, maples and fruit trees preferred—for egg laying. Using the pointed ovipositor at the end of her abdomen, she will make inch-long incisions into the wood of outer branches. About two dozen eggs will be laid in double rows in each slit, with as many as 24 such branch slits produced. These will interrupt the sap flow to outer twigs, causing wilting and breaking away at the slit. Although too many incisions may cause loss of vigor and even death to young saplings and transplants, most trees merely endure a natural pruning, causing nothing more serious than visual disturbance to people.

The eggs hatch by August and the small fishlike larvae drop to the ground and burrow to convenient homes for the next 17 years.

Despite the fact that the 17-year cicada's appearance has been recorded for over 300 years, misconceptions and folklore still exist. Perhaps the 17-year interval allows enough time to forget the facts and invent fiction.

Most people still call them locusts, but they have no relation to this group. Cicadas are not grasshoppers, but are related to plant lice. Aphids are their closest relatives. Early settlers to this country used the locust label because the insects seemed to appear as in a biblical plague.

Despite their large size and grotesque appearance, cicadas are no direct threat to people. They do not bite or sting, having no body part to do either.

In truth, some earlier people even considered the insect as being divine. Early Greeks used the insect as their symbol of music.

Legend relates that once two skilled harpists had a contest to determine which was the best musician. During the challenge, the peoples' favorite suffered a calamity—the high-C string on his harp broke. At the opportune time, a cicada arrived to produce its buzz-



**A limited number of commemorative patches marking the 25th anniversary of formal hunter education in Pennsylvania is still available. These high quality full color embroidered patches are sure to please hunters, hunter education instructors, and memorabilia collectors. Patches cost \$2.50 each and can be ordered from the Game Commission, Hunter Education Division, P.O. Box 1567, Harrisburg, PA 17105-1567.**

ing call at the pitch to save the day.

Benefits to many forms of wildlife even come from the cicadas' periodical appearance. They form an abundant food source for every opportunist in the wildlife kingdom. From chipmunk to red-tailed hawk and from brook trout to wild turkey, all enjoy a bonanza feast for a few weeks.

This summer will again allow people in the area of Brood VIII emergence to display their knowledge and reaction to the 17-year cicada. Once again truth will mix with fiction. But the commotion will end in a few short weeks as the newly hatched young begin their wait until the year 2002, perhaps dreaming the whole while of that brief moment in the sun in 1985. When their time comes for emergence, people will resurrect the fact and fiction of the insect's occurrence. The cicadas, however, will act out their part to factual perfection. After all, they will have had 17 years to learn their part.





BOB  
SOPCHICK



“THESE ARE the times that try men’s souls,” Thomas Paine once expounded. Using that phrase to describe the craziest spring gobbler season I’ve ever lived through might be just a tad dramatic. But sometimes a sportsman’s mettle is tested and, especially in the case of spring gobbler hunting, the experience can quickly reduce you to an addlepatented basket case. It happened to be a few seasons

And so the stage was set. The fates that bedevil turkey hunters from time to time began to chip away at me. By the season’s end I would be surprised at what I found out about myself as a sportsman.

A few days later, after having hunted hard since dawn and hearing zilch, I was hiking quickly back to my truck about 10:30, disgusted. I shoved my box call into my vest and turned my

# A Tempting Season

By Shirley Grenoble

ago, but whether my mettle is any the better for all the wear and tear I cannot say at this point.

I should have known it was going to be one of those seasons when I missed a mature longbeard at the first opportunity. I was hunting with a buddy from the Turkey Federation that morning. He’d already gotten his bird so I asked him to come along and call for me. My calling is adequate but his is expert, so I figured having the little edge of his skill on my side wouldn’t hurt.

We got a gobbler going first thing, and after several whispered strategy sessions and changing locations a couple of times, Norm finally convinced the bird to come in.

He came stepping and strutting. I sat waiting, arms propped on upraised knees, as ready and calm as any hunter can be with a big gobbler almost in range. I had an open spot all picked out, and waited until the bird stepped in there before I shot. But I missed. Embarrassingly so, for there was no brush between us. I had no excuse.

As any hunter knows, a miss is bad enough. It’s tough to be philosophical about it. To miss an easy shot while someone else is looking is far worse. What that miss did for me, however, was to create a feeling of pressure: the heat was on, I had to get a gobbler just to show Norm I really could do it.

thoughts to trout fishing. The gobble that vibrated from the woods nearly blew my vest off! It was 10:45 and a bird was gobbling from no more than 70 yards away. The temptation to set up on that bird, regardless of the time, was overwhelming. I was sure no one else was around.

“If I started him before 11 o’clock, what could it really hurt if I run a few minutes over legal quitting time?” I rationalized to myself.

I was face to face with a big problem. At least for me it was a big problem. Was I really a good sportsman or was I just a good sport when someone was looking?

So I left him there. But before the sun rose next I was back, waiting, listening. But the silence that greeted me that morning was cold as a walrus whisker.

The season droned on, and for me the pressure built. I really wanted to get a gobbler. I’d been lucky enough to bag one several years in a row and I wanted to keep the string going. Besides, there was a certain impetus, or so I mistakenly thought at the time, for the president of the National Wild Turkey Federation (as I was then) to be successful at this business of turkey hunting. Not to mention that I was still smarting from that ridiculous missed shot.

On Monday of the second week I decided to hunt an area I’d not yet tried

that year. It was a two-mile hike from the truck to reach the head of the wide mouthed hollow, where, more often than not, a gobbler would be roosting.

Because I like to be settled in against a tree when dawn arrives so I can consciously savor the sounds of the spring woods waking up, I hiked speedily toward the hollow.

With the two miles behind me and not more than another hundred yards to go, I was electrified when I heard a cluck! Instantly I knew what it was. Sure enough, I'd done the boner you can seldom undo—I'd carelessly walked right under a roasted gobbler.

I froze, of course, and tilted my head slowly to scan the trees. He obliged me by again clucking nervously, and I spotted him, perfectly silhouetted against the grayish, predawn sky, not thirty feet up in the tree above me. I could clearly pick out his beard and knew I had a big bird right in front of me, perched there like the proverbial sitting duck.

**HE CAME** stepping and strutting. I sat, arms propped on upraised knees, waiting for him to step in an open spot I had picked out. When he did I shot, but I missed.



Sooner or later every turkey hunter comes face to face with this moment. You bumble into roosting birds and have to make an almost split-second decision: Will I or won't I shoot a bird off the roost?

It's easy to sit in one's living room and declare you'd never do it. And mean it. But in the woods, fatigued and wanting to get a bird so you can get some rest, for one reason or another feeling pressured to produce, it's just as easy to seriously consider doing it. Especially when there's a gobbler sitting just a few feet away from your gun muzzle.

Did I consider doing it?

Yes. No one would ever know, for I was positive no one else was this far back that morning. And I could make up a believable story as to how I outfoxed him with my calling, ect. Etc., ect. And I wanted that bird badly. Yes, I considered it.

Did I shoot him off the roost?

No.

Do not ascribe me noble motives. I cannot spout philosophies about why I didn't. Or should I say couldn't? I only know I'm glad the choice was mine, not his. My not potting him off the roost was because I chose not to, and not because he flew away before I got a chance to.

Well, after he clucked a few times and pranced around nervously on the limb for awhile, he glided down into the hollow. If this were a novel, my pureness of heart would be rewarded and I'd get the prize after all. Being real life, however, I never heard a peep from the gobbler that day, nor any of the other days I went back in there after him.

The season went boringly on (no birds but large doses of fatigue and frustration), and by the second Saturday I was pretty dejected, wondering, as every turkey hunter does occasionally, just what it was I thought was so fascinating about turkey hunting. I decided on Saturday to hunt the area where I'd bagged my very first spring gobbler. I heard nothing at dawn but, about 9 o'clock a gobbler began to thunder.



I realized from his first gobble that he wasn't more than 75 yards from me, so I had no choice but to find a suitable tree to sit against right where I was. There was a thick tangle of downed trees off to my right side with a patch of scrubby pines next to it. It wasn't a good place, but I hoped that just this once my luck would hold and the gobbler wouldn't walk on the far side of it.

### Around the Bench

It didn't and he did. He came around the bench, passed along the upper side of the downed trees and went on by me. It's been my experience that if a gobbler passes your position it's nearly impossible to call him back again.

He passed the thick spot and stood there in the woods about 60 yards away, gobbling and strutting. He would not close the gap between us. There was no way I could change location for he'd see me the instant I tried to move. After he tired of it all, he walked on. When he was out of sight I tried circling him, but time ran out on me.

I left the woods with mixed emotions. I was discouraged at yet another defeat in this ridiculous season, but a sixth sense told me that on Monday morning he'd be right there. Well, so would I, I vowed.

Next day I faced the toughest test of all. I mean, just how much is a mother supposed to sacrifice for a child? I've heard all the statements, too — about how it makes a person much happier to see his offspring get a deer or turkey or whatever than if he gets one himself, and how one would much rather see a young person score than to score himself. However, we are not talking about a lad here but about a fully grown man already out of the Navy by several years. When he calls you on Sunday and says, "Mom, I finally got a day free to go turkey hunting, do you think you could put me onto a bird?" are you really expected to tell him about your honey spot, your private stock, so to speak?

We made arrangements to meet at 3:30 next morning so we could drive to

the mountain together. All day I argued with myself. "Mark's only a halfhearted turkey hunter anyway," I told myself. "He hasn't put in the tears and sweat I have over this spring season. I don't see why I should have to lead him into the one bird I've located. I'll take him to another likely spot and we'll take our chances, then I'll go for the other bird on Tuesday."

"But he's never gotten a turkey," this little nagging voice kept digging me. "He's such a good hunter otherwise, why not help him get a start in spring gobbler hunting?"

So call it mother love or whatever you will, but 4 a.m. Monday found us bumping along the mountain road en route to "my" gobbler. A light rain was falling when we got to the parking place.

"Might as well wait till it clears up a little," Mark said.

I agreed, so we settled down to snooze a little. I entertained the notion that perhaps the weather would be my ally and we wouldn't be able to go after the bird after all.

About 6:45 I could no longer ignore the sun streaming in the windshield, although Mark seemed to be still dozing. I poked him and said, "If you want to go for that bird, we'd better hit the trail."

He sat up, shook his head as if to clear his thoughts, then bounded out the door. "I'm ready," he cheered.

Drat!

### Tentative Calls

Twenty minutes later I gave my first tentative calls, attempting only to locate the bird. He gobbled back immediately. Wouldn't you know it. I motioned Mark to choose a hiding place.

There was a whopper of a fallen tree just a few yards away. Mark got behind it and leaned against a mound of dirt, resting his shotgun against the huge trunk. I found a tree 40 yards behind Mark, got comfortable, and set about to call the bird in for him.

As if following a choreographed program, the bird, after a few exchanges



**JUST THE** look in his eyes, his excited chattering, and the fact he decided he got the bird only because his mom is the greatest turkey hunter in the world made me tickled that Mark got the gobbler.

of calls, hit a small trail that snaked up through the woods and with no hesitation walked straight toward Mark. We watched him coming from over a hundred yards away.

I tried sending mental messages to Mark: "Let him come closer; be sure he's well within range before you touch the trigger."

Mark had had little experience with turkeys, and the sight of an adult gobbler inching his way toward you can unnerve the mightiest among us. It can totally obliterate a greenie's nervous

system. Because of his size, a gobbler tends to seem closer than he really is.

My mental telepathy must have worked, because Mark never moved a hair. When the gobbler was within 40 yards, good range for his 12-gauge, I expected to hear the shot. On came the bird.

"Shoot, shoot now!" my mind screamed.

Nothing.

"Could he possibly be asleep?" I silently asked myself. "Why doesn't he shoot?"

Closer came the bird.

Just as I was in danger of being blinded by my own cold sweat, the shot rang out. Mark had let the bird come to within 20 steps.

"I wanted to be sure, Mom," he told me later. "I wanted to be sure I didn't blow it."

Not bad for a novice.

I really was more tickled that Mark got the gobbler than if I had. Just the look in his eyes, his excited chattering, and the fact that he decided the only reason the bird came in so easily was because his mom is the greatest turkey hunter in the world, made me squirm in reproach for the thoughts I'd been harboring scant hours earlier.

If there were justice in the world, my trials and testing would have been requited by my finally bagging the old ridgerunner gobbler nobody's been able to get for five years. But, as I said before, this is real life, not a fairytale, and the fact is, I not only didn't get the old ridgerunner, I didn't even get a squeaky jake.

My turkey take that season was zero. But I learned I could count on myself when nobody else was looking. And I liked that feeling.

## Thoughts While Walking

*To triumph over difficulties is the essence of sportsmanship.*

— T. H. White





**MODERN technologies and proven procedures have been developed over the past decade to help public service agencies quickly locate lost individuals.**

Randy Finkey

# SEARCH

## The New Technology in Pennsylvania

**By Sebastian Marinaro and Ken Boyles**

**P**ENNSYLVANIA, one of the most picturesque states in the union, offers outdoorsman vast expanses of mountains and wilderness. Her sportsmen can tell you about spectacular vistas where valleys and peaks roll on seemingly forever. Another group of people can also attest to the vastness of the Keystone State's spectacular geography. They are the ever increasing number of people lost annually in wilderness areas. For example, Dennis Martin, a seven-year-old boy, wandered away from his parents along the Appalachian Trail. A massive search followed. It lasted sixteen days and involved over 2,000 searchers. The effort logged 26,589 man-hours, 69,811 vehicle miles, and included thirty-five different agencies. The final cost was \$287,704.

Dennis Martin was not found. The Martin search was the catalyst for the advancement in search tactics.

In December, 1983, two elderly men in unrelated incidents perished in the woods after becoming lost or ill while walking near their homes. In one of these cases it took searchers five days to locate the victim only 500 yards from his house.

To improve land search techniques, many changes have been instituted in the last decade. The early premise for land search philosophy was based on the idea of fielding a large number of searchers. This concept may succeed, based on chance or luck, though most time random searches are ineffective. In fact, random searches may be detrimental to the victim's welfare because

of the time they normally require to locate lost individuals. The national average of emergency searches annually is in excess of 100,000, according to the National Association for Search and Rescue (NASAR). This underscores the need for an organized approach to land search management in Pennsylvania.

### **Background Profile**

One of the most important areas in developing search technique is the need for a background profile of the lost individual. This became apparent when a historical perspective of search technique was developed and many past searches were investigated. We found that search parties consistently failed to investigate the victim's background for clues and related information which could have affected search planning. Additionally, we now know that clear behavior patterns will develop for specific age groups when lost.

For example, many young children tend to range uphill, seeking higher ground for better visibility. Older adults usually move downhill, taking the path of easiest travel. Even though this knowledge is not a real physical clue, it gives search operatives a handle on the victim's possible behavior.

The background investigation of a lost person should develop a possible pattern for search managers. The information sought must include at least the point last seen (PLS), physical description, physical health, and mental state. Other important considerations would include personal items, trip plans, outdoor equipment, experience, or anything else which might develop a lead for the search manager. This investigation must be thorough because clues found by searchers may be overlooked if this history is not developed.

Another critical aspect in a search involves logistics, the planning and deployment of search teams. The initial stage of a search is critical for several reasons. During this period, a command post must be established. This is

necessary to coordinate and process information, and thus maintain control of search teams. The command post evaluates environmental factors such as topography, weather and geography, and coalesces this data into a viable search plan. Other logistic concerns include transportation, communications, and support activities. These must be constantly updated by responsible personnel at the command post.

The command post is the core where all search teams are briefed prior to the search. This briefing covers physical descriptions, photographs, psychological profiles, and any other clues that may be of use. Initially, the command post will direct teams to areas with the highest probability of a discovery, victim or clue. For example, trained hasty teams will traverse roads or trails first and report to command post. Additionally, other trained personnel will begin pattern searches looking for clues. This technique is formally called "sign cutting." Structures and geographic areas of comparatively high physical risk, such as caves and ponds, are searched immediately. If available, aircraft and search dogs will be dispatched by the command post to possible victim locations. Soon, preparations for more thorough search tactics are made, based on information received from debriefed returning search elements. Having done this, the search can proceed with order and purpose.

### **Search Ordinary**

The actual search might seem quite ordinary after all this. It might seem that, if the search parties simply follow the dictates of the command post, all shall be well. Not true. While it is imperative that the command post organize and coordinate the search, it is equally imperative that our search team be properly trained and equipped to facilitate discovery and rescue. Many teams are involved in a search, and their specific functions will vary as their skills dictate. One such example is the use of a Navigation and Communication Unit (NAV/COM) on a sign-cutting opera-



tion. These teams are generally led by a point man, who is followed by a line of sign cutters looking for clues. The better trained these personnel are, the higher the probability of a positive discovery.

Many other search teams augment the sign cutters. These might include air scenting and tracking dogs (MANDOGS), grid search teams, and professional human trackers. Mobile perimeter teams stake out grid areas to contain the subject within established search areas. Special trained units handle specific assignments such as rappelling or cave or underwater searches. Medivac units must be trained to take coordinates from the NAV/COM leader when discovery is made and evacuation becomes necessary. These are just some of the special elements required to maximize team effort in the search mission.

**A TRAINED dog and handler have an 80 percent probability rate of discovering a clue in the area, and they can cover five times the area a searcher without a dog can. The greatest error in many search operations is the delay in requesting dogs.**

Randy Finkey



A search management team has the ability to put a numerical value on search areas. These are used to assign different search units. This theory of search probability provides a systematic means of covering all areas quickly and accurately. The process gives the search manager an instrument for determining success when a given area has been searched; he will have the ability to continuously revise search patterns based on the influx of current data from returning search teams.

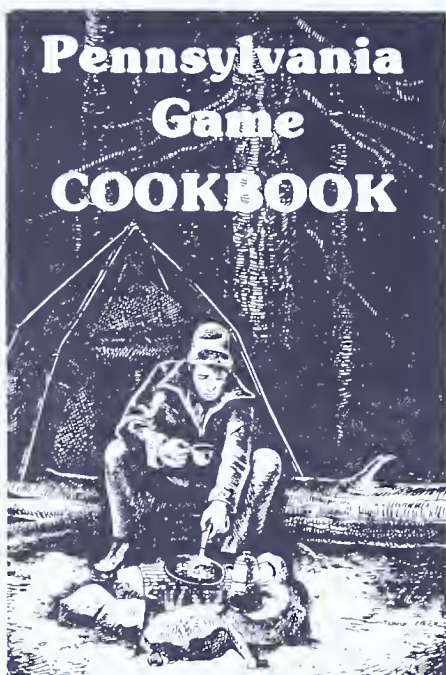
### New Technology

New technology breaks with tradition in looking at effective methods in the search scenario. In times past it was often said "the search ends at dusk." That's not the case now. Nighttime searches are the most likely to be successful in the hunt for a conscious individual. This is due to the victim's reduced movement and his ability to orient on light sources against a black horizon. Lights from mobiles working the perimeter and searchers with flashlights offer the victim a means to facilitate escape. Furthermore, the woods or fields are usually quiet at night. This allows the use of repetitive sounds from a stationary source as a prime attraction device.

Night also poses added threat to the victim's physical and mental welfare. Physical risk to a lost person increases at an alarming rate as each hour passes. Hypothermia, weather changes, possibility of injuries and need for food and water make it necessary to continue searching into the night. An even more devastating threat occurs after dark—the possibility of irrational behavior patterns developing. This occurs because of situational disfunction, which can result in disorientation and a pattern of confused behavior.

Our research shows that in the past most searches were interrupted at nightfall. We feel that was an error, perhaps a deadly one. We work for the victim—should we quit at his most pressing hour of need?

Traditionally speaking, search per-



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by **GAME NEWS** readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from **GAME NEWS** office.

sonnel called for tracking dogs when all other methods failed. We, however, recognize the great utility of trained search dogs. Tracking dogs and scent detecting dogs are by far the most useful tools in a search. A trained dog and handler have roughly an 80 percent probability rate of discovering a clue in their assigned area. They can handle five times as much geography as a searcher without a dog. Search dogs can easily negotiate heavy brush and terrain which is nearly impossible for human searchers. The basis for this ability is the dogs' olfactory system, which once harnessed as a detection system is phenomenal.

The greatest error in many search

operations is the delay in requesting search dogs—if they are ever called at all. This delay often creates a lag in response capability which exacerbates a search problem. Given a scent article, dogs have incredible ability to bisect tracks and give direction clues to a search. Possibly the greatest benefit is the way that search dogs can eliminate geography. This is true because oftentimes it is necessary to determine where the victim is not.

### Search Success

The success of a search depends on teamwork, planning, and dedicated people. The weakest links in search technology are training and management. The implementation of a land search management program and subsequent training curriculum has become an issue for the '80s in Pennsylvania.

In March of 1983, with the help of the National Park Service and the National Association for Search and Rescue, the Pennsylvania Department of Environmental Resources' Bureau of State Parks began to train selected park personnel in land search management. Since the initial training, a pilot program has been initiated in southcentral Pennsylvania. This team of trained professionals can aid existing agencies in managing a search mission. More important is its ability to provide other units with search training and preplanning. Currently, search operations are assigned to local law enforcement and fire fighting personnel. Many of these are not aware of the latest search procedures. The trained team can help overcome such deficiencies.

Of all searches, the most successful is the one that never took place. The use of preventative search and rescue programs allows outdoor-oriented people to learn how to avoid becoming lost, or provide them with the knowledge to sustain life in a survival situation should it arise. We believe this prevention is the responsibility of government, industry, schools, and individuals. It can be accomplished through education.



# The Indian Eye Test

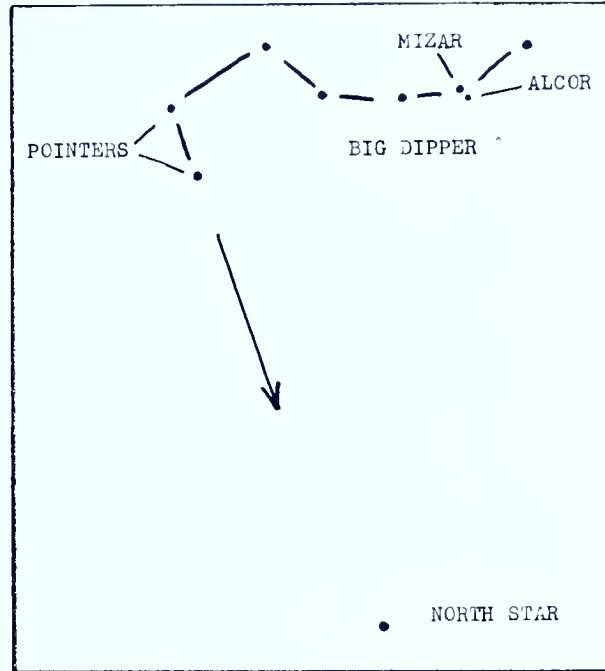
By Joel Littell

**Y**OU outdoor-minded folks that live away from the lights and smog of our larger cities might enjoy taking the Indian Eye Test. Now don't get worried! This doesn't require a trip to the local eye doctor, and it isn't going to cost a cent. In fact, it's the only test I've ever taken that is actually fun. All you have to do is step outside on a clear night and locate the constellation known as the Big Dipper. If this presents a problem just ask a local Boy Scout. He will be delighted to help out.

The Big Dipper is probably the most familiar constellation because it is easy to identify (it actually looks like a dipper), and the two stars that form the side of the bowl opposite the handle point to the North Star. This constellation contains seven easily seen stars. The one we are interested in is the second star counting from the very end of the handle (see illustration).

This star is actually a double star. That is, from our point of view here on earth that point of light is produced from not one but two stars. One of these, which we have named Alcor, appears to be riding the other, Mizar, piggyback. The American Indian referred to Mizar and Alcor as Squaw and Papoose, and any young brave who could see these two stars was said to be blessed with the sight of an eagle and hailed as a great hunter to be.

To take the Indian Eye Test, first let your eyes adjust to the dark for about ten minutes. Then, while trying to resolve both stars, use averted vision. That is, don't look



directly at the double star, but just off to either side, keeping the double star in your field of view. This makes use of the rods in your eyes that allow you to see better in dim light.

Still don't see two stars? Take out the old binoculars and convince yourself you're not wasting time. Now that you're convinced you had better get back inside before you start wondering about all the other stars up there. Stargazing just might become a habit you will find impossible to break.

---

## Pelts Valued at Almost \$4 Million

During the 1983-84 trapping season, pelts of Pennsylvania furbearer and predator animals worth almost \$4 million were placed on the market. The figures, as detailed below, represent only Pennsylvania-caught furs bought by licensed raw fur dealers. Furs shipped or transported out of state by trappers or held for their own use are not included in this tabulation.

Muskrats, 228,749 sold, average price \$3.58, total, \$820,052; skunks, 1,325, \$1.27, \$1,683; minks, 4,877, \$17.99, \$87,721; opossums, 37,860, \$1.32, \$49,946; beavers, 3,766, \$14.88, \$56,037; raccoons, 155,035, \$10.58, \$1,640,329; weasels, 148, \$0.48, \$72; red foxes, 20,319, \$31.74, \$644,831; gray foxes, 18,493, \$31.31, \$579,004. Totals, 470,572 pelts valued at \$3,879,675.





# Those Incredible, Gullible Spring Gobblers

By George L. Harting

**“H**OW WOULD you like to be our president?” jibed a bystander. “Everything he does is sure to be considered wrong by someone.”

It's like that when one defines the nature of the wild turkey. Whatever one's opinion may be, someone will gainsay. To wit:

One writer described the tribe of *meleagris gallopavo* as being “frustrating, nerve-wracking, mind boggling, puzzling, etc.,” and then concluded with the opinion that “their ability to see and hear the slightest twinge of anything suspicious borders on the ridiculous. If the turkey could scent us, we lumbering hunters wouldn't stand a chance.” In contrast, another expert simply headed his discourse on wild turkeys with the title “Turkeys Are Dumb!” The apparent contradiction, however, does not exist; the difference depends upon how much of the bird's savvy is put into play. This fact was clearly disclosed through my contact with three gobblers last spring; the encounters revealed conclusively that their behavior can range from the incredible to the gullible. It unfolded like this:

In keeping with tradition, Berky and I were in Perry County on opening day for spring gobblers. Through the years, our hunting efforts there have resulted in exposures to many traits of the bronze gobbler in Pennsylvania. With such a backlog of turkey lore gleaned from the area, we deem it the appropriate place to be on the opener.

There were misgivings, however, about last spring's prospects. Few turkeys had been sighted by deer hunters; we have learned that such sightings can

be a reliable indicator for the spring hunt. We nonetheless elected to be in camp for opening day.

The first response to our turkey talk occurred at mid-morning on Monday. I was working some heavy timber just up from the hemlock-lined brook. A gobbler answered my call. Suitable cover was found for concealment, an appropriate lapse in calling was observed, and then a second call was stroked. Again, a reverberating gobble echoed up the draw to where I waited. The sequence was repeated a third time. But in spite of these responses, that bird made no effort to find the alleged lovesick lady to whom he was giving his attention. In similar instances in the past, such exasperating evasions were successfully broken by moving toward the bird. In this case, however, the proximity of the caller to the called, as well as the sparseness of the timber, did not allow such a gamble. Eventually, shooting hours passed. I never saw the bird.

## Cussed and Discussed

As we shared our noon meal that day, the ways of turkeys were cussed and discussed, the outcome being that Berky anticipated an encounter with that bird on Tuesday. As we compared notes after that third day's hunt, my partner disclosed that he'd received a response approximately at the location where I had received mine the day before. “He gobbled only once and would not come

in," was Berky's dismal report. We left camp after Wednesday's hunt and that frustrating gobbler did not accompany us home.

What factor in the behavior of these magnificent game birds prompts them to ignore an invitation to the mating adventure? On Tuesday afternoon we fished in the stream. As we passed through the gobbler's hemlock haven, we noted only one pair of tracks in the creek sand. The absence of additional turkey prints indicates that a ready made harem was not the distraction which prompted the gobbler to avoid us.

### Time On My Hands

With some time on my hands, I headed later in the week for Sullivan County. Early morning efforts on the first day there were made in a remote area of a Game Land tract. When, without success, I returned to my car, I still had an hour of hunting time available. The only option was to investigate the abandoned pasture to the south. The area was comprised of some pine and hardwoods, but predominantly the cover was shoulder high brush. A small stream heavily shaded by hemlocks marked the right border of the acreage.

With limited confidence as to what the area could offer, I entered the tract and, after a quarter-mile walk, discovered a hayfield forming the southern border of the pasture. A struggle put me beyond the barbed wire fence and my direction was toward the stream bottom. Upon stroking my slate for a first try, I was rewarded with a resounding gobble perhaps 200 yards beyond the brook. At first, the bird would answer but not move toward the call. Then I noted there was some movement upstream, and eventually determined he was heading in my direction. His calls became more intense.

My position was concealed behind a huge stone pile and pines. With his lateral movement being to my right, I elected to move to the other side of the stone heap and back into the pasture for

a better view. By the time I had negotiated the fence, the gobbler's calls were excitingly close. The patches of cover ahead which the natives call tea brush were watched closely as I anticipated appearance of the bird when he moved into shooting range.

When, however, the gobbler came within perhaps 80 yards, silence fell over the valley. After a long pause, I judged the bird had abandoned me, so I pulled my call into position for a final try. As I did that, a mighty swish of wings was heard from the exact location where I'd made the first call. My shotgun was standing against a tree—my call demands the attention of both hands—so the bird eluded me.

After my early frustration subsided, I evaluated the situation. That bird had circled around my right side and approached from the rear. Hunting literature alleges such tactics on the part of turkeys, and now it happened to me. One can only conjecture as to why that

**UPON stroking my slate for a first try, I was rewarded with a resounding gobble perhaps 200 yards beyond the brook. At first the bird would answer but not move toward the call.**





responsive creature had rejected a direct approach. Could it be he feared a major rival had beaten him to the prospective mate? Was he careful because he'd been flogged earlier on a similar adventure by the boss of the harem? Did caution prompt a side entrance to the scene of action? One will never really know. It is quite conclusive, however, that the cautious ways of the bronze gobbler are many.

One more adventure with the bronze beauties was to be undertaken. This time it occurred in the rhododendron swamps of Pike County. Two frustrating days in the western portion of the county drew absolutely no response from the desired quarry. A second more easterly location in the vicinity of Gifford Pinchot's Gray Towers was to be the spot for a final encounter. Rain was falling upon arrival at my host's home and I despaired of the soaking that appeared imminent. I elected to make a short run, however, then circle back to the house. By the time my host had finished the morning chores and had driven me to the locale where the hunt would begin, the rain had subsided.

A hundred yards from the public road, I entered the courtyard of an abandoned homestead. Pines accounted for a major percentage of the timber stand, and stone walls were covered with a heavy tangle of brush, honeysuckle and mountain laurel. It looked like an ideal haven for the flock of turkeys it reputedly supported. It was time, now, to try a call. Response was immediate. To have it on a first call seemed almost unreal; it was a nerve-shaking gobble from a bird located just beyond the stonewall.

Time and precision were of the essence. A bramble bush was found for cover, my face net was put into place, and my scattergun was readied. An instant later the gobbler rounded the deer trail into view and my load of 4s from the 12-gauge magnum produced an instant kill. It all happened so quickly that the appropriate exodus from the woods was simply to retrace the path on which I had entered.

**Subscribe to**

**GAME NEWS**

**For a Friend . . .**

As I moved toward my host's cabin, I met him driving toward his day's employment. Stunned at seeing me back on the road with a gobbler on my shoulder, he quipped: "If it's that easy, I think I'll start hunting them too." I let him know that for a 24-year period I had not even heard a peep from a turkey.

An examination of my bird revealed that he was mature—spurs an inch long, a 9-inch beard, and he weighed in at 17 pounds. His response had not been prompted by the impetuosity of a jake. From the scuffed edges of his wing feathers, one got sufficient evidence he had done his share of strutting for an attentive harem.

### **Cunning? Dumb?**

In the introduction to this piece, mention was made about the alleged cunning with which the wild turkey is endowed. If my appraisal were taken solely from the behavior of this third bird, I might agree with the author who said turkeys are dumb. It is, however, the overview to the ways of the turkey that enables one to understand the divergence of his activity. I suppose it is not too often that a hunter is exposed, in a single season, to so wide a variety of turkey behavior.

It will be well, then, for the novice who enters turkey country to be aware of the tactics this bird may put into play. To know he is incredibly wise will keep the hunter alert. To know he can be exceedingly gullible will lend encouragement.

Turkeys are capable of the incredible. At the other end of the act, they can be most gullible. The difference in one's appraisal depends largely in what mood a gobbler is in when he is encountered.

# BEAKS TO BILLS

By Bob Cubbins



**PARTLY COMPLETED** whistler, rear, and blue-winged teal. Though still far from finished, basic lines closely reflect shapes of these species.

**G**REAT CHANGE isn't easy for a man in his mid-fifties, but a good friend ignored that truth when, on a grouse hunt, he suggested I might enjoy a day in his duck blind. A veteran of more than forty years of upland shooting, I thanked him for the offer and secretly vowed never to be caught holding a blunderbuss 12-gauge across my knees and cackling on a walnut call like a sick fish crow. A little arthritis wasn't going to make me say uncle. Might as well ask Arnie Palmer to switch to tetherball.

I fought on through the cover, wincing as daggers stabbed my knees and ankles and wondering just how many more seasons would find me afield. How could a man who had chased pats and doodlers through the frost fires of countless autumns find a transition to waterfowling acceptable? I'd continue limping over ridges. The joints weren't gonna win this one . . . and I'd *never* relinquish my 20s for a 12.

I held out for a year or two. Then I

phoned Tim Benner. "Your offer to go duck huntin' still hold?"

"You bet," he said. "Joints barkin'?"

"'Fraid so." I didn't tell him I'd been forced after a day in woodcock swales to hit the sack with a bottle of aspirin and a firm order from my wife to stay put.

I bought a duck stamp — hesitantly — for I was sure I'd use it once only, and on Saturday morning Tim and I looked out from his blind on a stool of puddle ducks he'd made in his workshop. Dawn rolled out a pewter sky on a stiff wind with a scent of rain, all indicators, so Tim said, of trading ducks.

## The Singing

We sat for three hours, Tim, his lab, and I. The wind died to a breeze when the sun broke through unexpectedly, and we saw only a few distant flights of teal and an amorous ruddy that did his best to court Tim's hens. But in those hours, I became a convert. The serenity of the scene, the breeze that riffled the rushes, the repressed excitement, much like that a man knows on a deer stand, all contributed to a heightened awareness of why men hunt in the first place. To brush away the cobwebs, yes, but mostly just to listen, as the late Sigurd Olson put it, to "the singing."

When we picked up the dekes, I asked, "Are these things hard to make, Tim?"

"Well . . . they're time consuming, but there's a lot of satisfaction in watching birds decoy to blocks you've made yourself."

"You still make 'em?"

"Oh, occasionally. Most of what I do now is decorative you know, stuff for the mantel or the den."

Later, reveling in pain-free joints (sitting creates darned little friction), I



looked at Tim's "stuff for the mantel or the den." Half-size, exquisitely wrought birds, true to pattern and color. That did it. I fell like a ten-pound plumb bob from the top of Independence Hall.

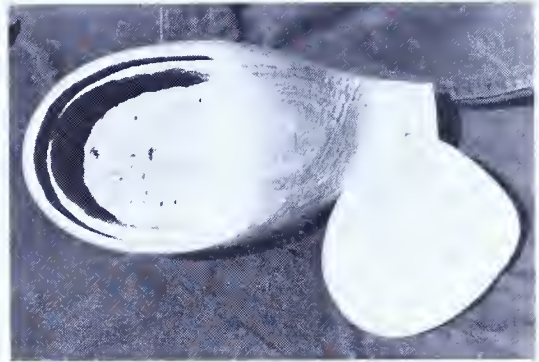
On Monday, I traded a deer iron and a few bucks for a new 12-gauge, modified. On Tuesday, I ordered six black ducks from L. L. Bean, having reasoned that by the time I learned to make working dekes I'd be shaking hands with Methuselah.

I went to the bookstore. I bought Tim's first decoy bible, Eugene Connett's *Duck Decoys*. Three days later, I bought Bruce Burk's *Game Bird Carving*. About a week later, I bought Burk's *Waterfowl Studies*. Poring over these nightly and trying hard to justify the extravagance, I decided I'd *have* to make some decoys. That meant buying a bandsaw, the most basic unit for anyone intent on turning out his own blocks. Expensive. I'd have to think about it.

In the meantime, I went duck hunting again, productively, and the mallards and teal my wife and I enjoyed under Bob Hinman's Cumberland Sauce (from *The Duck Hunter's Handbook* . . . yeah, I couldn't stop the profligate spending!) sold us on the absolute necessity of purchasing a bandsaw. If an additional mortgage on the house was essential, we'd have to go for it. Ducks on the table we'd never again be able to live without. Grouse and woodcock were old hat, but ducks . . . under Cumberland Sauce? We began to salivate just thinkin' about 'em.

### We Read, Studied, Dreamed

While the bandsaw purchase hung in the wings, my wife and I, both incurable bibliophiles, went from one book store to another. In rapid succession, we bought *Ducks, Geese, and Swans of North America*; LeMaster's *Decoys—The Art of the Wooden Bird*; Dr. Starr's *How To Make Working Decoys*; Barber's *Wild Fowl Decoys*; Spielman's *Making Wood Decoys*, and a couple of pattern books by Shourds and Hillman. We bought, too, *Shore*



**HOLLOWED-OUT** body, as shown in bottom view of whistler, saves weight and, more importantly, helps assure that internal pressures won't eventually crack the block. Bottom plate fits on shelf and seals recess.

*Birds* by Flackenstein. We read, we studied, we dreamed.

On a trip to Bristol, we stumbled on a Sears sale. We made a deal with Scratch and bought a 12-inch bandsaw. (Scratch can't box us for fifteen years, and by then we'll have made all the dekes we want and eaten all the duck we can hold. What's a little heat when a man and his wife are full of Cumberland Sauce and rich flesh?)

Three days later and after frequent invocations to condemn various components of the saw, we had it assembled. It's given yeoman service ever since. My workbench already housed a variety of files, a couple of Stanley Surform rasps, and a mighty assortment of X-acto blades, all necessities. Since then, we've added a Foredom tool, that mighty miniature power tool, and a small tabletop drill press. A man really



LONG-BILLED curlew, left, and spotted sandpiper, below, are fun to make and are thought of as "confidence decoys." Actually, Cubbins just likes to make different species so he can look at them. His usin' decoys come from L.L. Bean.



doesn't need these to turn out dekes, but they sure make the job easier.

We found a trove of air-dried 4 x 6 pine at a local lumberyard, transferred what looked like the easiest pattern from Shourds and Hillman's *Carving Duck Decoys*, and started pushing a block through the saw. The cut-out looked like the pattern, and we were in business. Ignoring some of the authors' instructions, we began carving the head and body blocks.

### First Bird

We learned a lot from that first bird. Blue-winged teal don't look like sea-gulls, and if a decoy is to float and self-right, it has to be balanced and properly weighted. Moreover, it ought to be hollowed out with a Forstner bit so that internal pressures won't crack the block and it'll float better. Solid-body dekes are still made, and they're fine, providing the wood's thoroughly dry beforehand. But as the neophyte soon learns, it isn't easy to find kiln dried pine or basswood.

We kept that first bird, despite its looking like a dyspeptic gull with elephantiasis of the gut and a brain cavity better suited to a garden mole. We hide

it in an inconspicuous niche in the bow window, behind the shorebirds we made as confidence decoys. We call it a primitive, a polite term for a horrible mistake.

We quickly learned what the masters affirm: a good head will carry a poor body, but a poor head won't carry anything. In other words, to make a good deke, the carver must concentrate on turning out a head with character, an elusive quality that appears only when the carver has carefully studied the proportions of a given species and accurately reproduced them.

We went back to the books. We studied Burk's photos, journeyed to breeders of live ducks, went to decoy shows. We learned that the heads of master carvers reflect individual carving techniques, all of which, of course, are acceptable so long as realism is the watchword.

We again settled down to the bench. A good number of heads went into the wastebasket, but, with persistence, our eye-hand coordination improved, and pintails, teal, blacks, whistlers, and broadbills began to look like the birds we'd essayed. Time was unimportant; we were striving for realism. We think



**THE BLACK DUCK**—a favorite of almost everyone. Cubbins' approach is not every-feather-detailed reality, but a resemblance to time-worn blocks such as used in times past by Chesapeake baymen.



we've almost attained it.

We now detail a head as carefully as possible, taking pains with the junction of bill and head, the correct lines of the culmen, the proper placement of eyes and nostrils, the nail, the underside of the bill, and the expression of the cheek.

Rarely do we carve any detail into the body, save perhaps the junction of the tail and body. It's the shape of the diver or shoal water duck we're after, the elevation at the middle of the back, the roundness or slimness, the slope of the tail.

Eschewing the decoratives with individually carved feathers and detailed burning-in techniques, we've settled upon carving birds that more closely resemble those time-worn blocks that Jersey and Chesapeake baymen once cast into tidal waters, birds with a durable look, birds that will carry the viewer back to market hunting days and yet still appear as freshly sculpted decoys. Modern carvings are indeed beautiful to behold, but for the old waterfowlers we've met, they conjure more of studio art than choppy waters, sub-freezing temperatures, rafts of canvasbacks, water-spewing retrievers, and sinkboxes. We want blocks with the simulated patina of age and the honest solidity of pre-1918 dekes. Perhaps we're motivated by nostalgia.

To achieve this illusion of age, we rarely sand with anything finer than 6/0 paper. Painting then yields a flat, lusterless finish, a highly desirable quality in a working decoy.

Almost all our texts offer various ways to close hollowed bodies. Some recommend making the body in two halves and joining them with epoxy. Others suggest hollowing a shelf on which the carver then fits a base of half-inch pine or basswood. Still others

recommend a bottom plate cut to the outside dimensions of the bottom of the body. We've tried all three and concluded that the last is the most effective for us. In cutting our profile patterns, we simply subtract three-quarters of an inch from the depth, scribe a line, and then cut to pattern. Later, it's easy to set the hollowed body on a slab of three-quarter-inch pine, trace the bottom of the body on the slab, cut it out on the saw, and glue it to the block. A little sanding fairs it all in. If the joint has holidays, we fill it with Duratite wood dough, a much better filler than plastic wood. Plastic wood shrinks; wood dough doesn't. A final sanding and the seam's invisible under paint.

### Drop In a BB

Incidentally, before the bottom plate is epoxied, many carvers like to drop in a BB or a few shot pellets so that handlers will immediately know the bird is hollow. We once made the mistake of shaking the finished deke before the glue had dried. The BB, of course, lodged in the glue that had dripped into the hollow, and our bird was silenced. We're now careful to recess a tiny spot in the center of the body. Into this goes the BB, there to sit quietly until the epoxy has set. With five-minute epoxy, the waiting period is short indeed, but it's still a mighty temptation to pick the block up and play with it.

We affix finished heads with the same epoxy and an Everdure or brass screw



### Question

I don't hunt, but my 12-year-old son wants to learn to hunt. Do I need a license to take him hunting?

### Answer

No. However, you may not participate in the hunt in any manner. The Game Law requires that your son be accompanied by a parent or a person serving in loco parentis or guardian or some other member of the family 18 years of age or older. Also, your son must take and pass a hunter education course prior to applying for a hunting license. You must also co-sign his hunting license application.

through the hollowed out portion of the block into the neck. If the glue line at the juncture of the neck and head requires filling, we again use wood dough and carefully fair it in with sandpaper.

When a decoy is ready for paint (acrylics get the exclusive nod these days), we seal the block with sander's sealer, Krylon, or shellac cut to a 50-50 mix. Sealing isn't necessary with acrylics, but we think we gain a little more security against moisture.

Then, with our books opened to color plates of the duck, we labor under a strong light with about five basic brushes—a short liner, a long liner, a fan brush, and a couple of flat jobs for quick painting of large areas. When the

deke's finished, we cover the whole block, whites included if there are any, with a very light wash of burnt umber. Brilliant contrasts are then subtly toned down, and the bird emerges like a block resurrected from an old bayman's shanty.

A few rubs come to mind. Once you start carving dekes, you can't stop. And . . . our garage now barely holds the snowblower, the lawnmower, the autos, and the usual assortment of garden tools. We have too many board feet of basswood, poplar and pine curing on ricks. If we had a garage sale, local lumbermen would holler "Foul!"

Here's the biggest rub of all: we've not used one of our birds to toll ducks; they toll eyeballs instead. Most of 'em are half-size anyway. This is the insidious thing about making our own "working" decoys: they don't work. We can't abide the thought of a dent, a nicked bill, a section of abraded paint, or a broken tail. Nope! With L. L. Bean's cork-bodied dekes in the basement, nicely bagged to go to work with the first nor'easter in October, we're not about to suffer as we watch our carvings knocking tails in a gale wind.

They're where they ought to be . . . in the den, on the mantel, in the bow window, in the kitchen. And every time we look at 'em, we feel the snap of cold on our faces, the misty rain that runs off our cap peaks and settles on numbed fingers and oiled receivers; we hear the wind riffing the rushes, the ker-honk of Canadas winging it south, the whistling of goldeneyes as they sideslip over the blind; we scent the marsh; we hear "the singing." We taste Cumberland Sauce.

And anybody who says great change isn't easy for a man in his mid-fifties has no imagination.





**GINSENG** has been dug in the United States for centuries, both for medicinal use here and for export to China. There was a time it was second only to the fur trade in export.

# Ginseng in Pennsylvania

By Kim D. Pritts

**P**ANAX QUINQUEFOLIUS, ginseng, seng, sang. These are all names for American ginseng, a woodland herb eagerly sought for its medicinal root. Ginseng is native to Pennsylvania, and occurs naturally throughout much of the eastern United States. Although rarely found in abundance, this small perennial plant becomes the focus of searches by many Pennsylvania outdoorsmen each fall. Their specific objective is to dig and sell the fleshy aromatic root which is highly prized in the Oriental countries.

Ginseng has been dug in the United States for centuries, both for medicinal use here and for export to China. Selling ginseng was so profitable for pioneers, there was a time it was second

only to the fur trade in exports. Oddly, the price paid for ginseng in China is determined more by its shape and physical characteristics than by its medicinal properties.

How did this American plant become so popular and highly prized in China? Asiatic ginseng, *Panax schinseng*, has been used as a medicinal herb in China for thousands of years. Early in the 18th century, a Jesuit missionary in Canada recognized American ginseng as a close relative of Asiatic ginseng. He contacted some Chinese and found they would pay high prices for American ginseng. Ginseng exporting soon became big business, and the search for ginseng spread into what is now the United States. Fur companies became



the major buyers, and that part of our heritage is seen yet today as many fur companies still engage in the ginseng trade.

American ginseng could not reproduce fast enough to keep up with the exploitation. It became rare. Today, ginseng is so rare it is protected throughout the United States by the Convention on International Trade in Endangered Species of Wild Fauna and Flora. This means a federal export permit is required for international trade and the permit can be obtained only if exportation will not have a detrimental effect upon the species. Since most American ginseng is exported, the export permit is an effective tool in controlling the harvest of wild ginseng. With ginseng exportation coming under closer scrutiny each year, many states have established a digging season to control the harvest. Pennsylvania does not currently have a season or restrict the harvest of ginseng in any way.

### Sangin

Ginseng digging, or sangin, is a heritage which has been handed down through generations of Pennsylvanians. Modern day sangers set out each fall, usually starting around Labor Day when the berries on the ginseng plants have ripened. They search isolated mountain areas, carefully digging the roots of mature ginseng plants. Years ago, ginseng was dug year-round and

many plants were destroyed before they could produce seeds. Today, ginseng hunters recognize the value of waiting until ginseng produces and ripens fruit before digging. This allows the seeds to be planted to replace the roots taken. A good sanger digs only mature roots for market as the immature roots are small and add very little weight to the day's take. This is a valuable practice for both the sanger and the ginseng plant. Small roots can actually lower the price per pound paid to the digger, and permitting the small plants to mature and produce seeds ensures the plant's continued survival and future ginseng hunting.

The plant responsible for this intense interest is rather small and unobtrusive. Ginseng sprouts a single stalk each year which branches into three leaves. Each leaf contains five leaflets, although there may be some variation of this arrangement due to maturity and growing conditions. Ginseng goes through several leaf patterns as it grows, with the mature arrangement consisting of three leaves. This is called a "three pronger." Some wild plants produce four leaves, but that is not common.

Mature ginseng plants produce berries on a seed head which rises from the stalk between the leaves. Small, greenish-yellow flowers bloom in early June, and green berries form throughout the summer. The berries, each containing several white seeds, ripen to a crimson color in early fall and drop to the ground or are eaten by birds and the seeds expelled some distance from the parent plant. Seeds take up to eighteen months to germinate, and during that period are subject to predation by mice and chipmunks. Ginseng may be attacked by several fungus diseases, and nematodes prey on the roots. This natural loss along with human predation can severely reduce a ginseng population.

The ginseng root itself is small and fleshy and reminds one somewhat of a small distorted carrot. A nice-size wild root will be the size of a man's thumb.



Ginseng roots tend to branch into odd shapes and may have more than one rootstock coming off the top of the main root. Ginseng develops a bud scar atop the root from each year's plant. These scars build a neck on the root and may give it a person-like appearance. Additionally they reveal the root's age as each scar represents one year's growth. Ginseng is a long lived herb, with roots over one hundred years old being reported. Competition from other plants makes ginseng growth slow. It is a forest plant, requiring shade for survival, and the root enlarges only slightly each year. Ginseng roots have a somewhat corky texture and are featherlight when dried. They lose two-thirds of their weight when drying, and it takes 300 to 400 roots to make one pound dry. Although the current market price of \$130 a pound seems tremendous, each individual root is only worth thirty-five to forty cents.

Ginseng is used occasionally as a medicinal herb and general tonic in the United States, although it is not recognized by the American medical profession. Pioneers and Indians routinely used ginseng and other herbs for their healing qualities. The Chinese, on the other hand, have used ginseng in medicine for thousands of years and still use it today. It is their most valuable herb and is said to cure a number of ailments in addition to being a stimulant and an aphrodisiac. Most American ginseng is sold at auction in Hong Kong, and from there is distributed to various Oriental countries. Taiwan is the largest purchaser of American ginseng.

Ginseng is a resource which Pennsylvania must use wisely. Exploited for hundreds of years, it is rare throughout the state and nearly nonexistent in the heavily populated counties. Botanical records indicate that ginseng was con-

## ***GAMEcooking Tips . . .***

Use ziploc bags to marinate small roasts, steaks or chops. Place meat in bag and cover with marinade. Press out excess air before sealing. Meat marinated in this manner requires little attention because all surfaces are in the marinade; turning several times is not necessary.

### **Marinade**

- 4 cups red wine
- 1 medium onion, sliced
- 2 bay leaves
- ½ tsp. rosemary
- 4-6 black peppercorns, to taste (crushed)

### **Bear Pot Roast**

- 3 to 4 lb. bear roast
- Oil for browning

Place roast in deep bowl or in plastic bag and pour marinade over. Turn every six hours if bowl is used to make sure all sides have been marinated. Refrigerate overnight. Before cooking, remove roast from marinade and pat dry. Heat oil in heavy dutch oven. Brown meat lightly on all sides. Cover and bake in slow oven (250°) for one hour per pound. Baste with marinade several times. Serves four.

**—FROM WILD GAME COOKERY  
BY CAROL VANCE WARY**

sidered rare in southeastern Pennsylvania by 1900. With the increased destruction of our woodlands for development, ginseng is in danger of fading from the Pennsylvania flora altogether. The selective harvesting of mature plants and the planting of seeds by the digger is perhaps the only way we can ensure ginseng's continued survival in the rugged forests of Pennsylvania.

# This Dog's Gettin' Older

By Nick Sisley



A SPECIAL bond developed between Mary Ann and Honey within minutes of when they first met, and it still exists today.

himself. I like to name my dogs after book titles, and Ruark's seemed particularly appropriate, what with this Lab's coat so closely resembling the color of honey. Thus the history behind this dog's somewhat effeminate call name.

His sire was a yellow, bully looking Lab appropriately dubbed Kimberwick Bully for Ben. His dam belonged to Will Johns, that gyp being christened West Maple Tammy. Will, now departed to marshes and flooded rivers in the sky, was a long time friend, former GAME NEWS editor, and later Chief of the Information and Education section of the Pennsylvania Fish Commission.

I found out at the September '74 meeting of the Pennsylvania Outdoor Writers Association that Will's dog had recently had a litter of pups. Before the weekend conference adjourned, I had Will bring the two remaining pups, both males, to the motel where the meeting was taking place. After spending at least an hour trying to figure out which tawny colored youngster to load in my truck, I still hadn't made up my mind, despite loads of advice from numerous other writers in attendance.

Finally, I selected the one who was eventually to become Honey, put him in the pickup box, and started the four-hour drive home. At a rest stop halfway, I checked him. A tad car sick, he had messed his box a little. I cleaned that up, then decided to bring him into the cab with me for the rest of the trip. He quit drooling almost immediately, rested his head between his paws, eyes focused on me, and stayed in that position until we reached home.

**H**IS AKC number is SB16008. Pretty soon he'll be eligible for canine social security, though he has yet to pay his first cent of state or federal tax. Honey has paid his dues on occasion, however. They've mostly been paid in and around duck marshes of various description. Because of his name, without further explanation you might think both the dog and I a bit strange. Honey is not exactly a common moniker for a male Labrador. His registered name is The Honey Badger, after Robert Ruark's fine novel that centered around lead character Alec Barr's search for



I'll never forget the expression on my wife's face as I lifted him out of the pickup at my backyard kennel. If anyone ever witnessed love at first sight, I did right there. Within minutes a bond was created between the two that exists to this day. Honey will listen to me rather than Mary Ann, but only because he knows he has to, not because he wants to.

### Fetches Socks

What followed in the months ahead were untold numbers of fetches socks, then even more boat fenders, these followed by a blue jillion "overs" and "backs" and "ins," then working around decoys, from canoes, out of boats, from fake blinds, the rudiments of "blind" retrieves and more. It didn't take long before I knew Honey wasn't going to be one of the great retrievers. For one thing he tended to quit too soon when taking a line. He'd go so far, then veer off to one side or the other and start hunting. Though I worked on this fault, I frankly didn't stick to it tenaciously enough.

Consequently, we went hunting, Honey and I, and we had our times together. This isn't Honey's epitaph, but his hard hunting days are numbered, so I'd like to express some public appreciation for him before the day comes when I have to tearfully dig his grave.

In his first season, in 1975, he saw his first action with grouse and woodcock, but Honey was supposed to be a waterfowl dog. I already had pointers for grouse and woodcock. One of the biggest hunting mistakes I ever made was not taking this youngster who was still figuratively wet behind the ears to Ed Moxley's place in November of that year. I thought a lot about it before I left the house, regrettably, without the pup. The next day, when I didn't have him, I had more regrets.

Since '75 was his first year, I had wondered if Honey's less than impeccable puppy manners might be a pain for my host. Moxley has a magnificent piece of marsh near Sandusky, Ohio, on the south side of Sandusky Bay, which adjoins Lake Erie. Dikes galore

and many pounds of planted natural duck seeds make it a puddle duck paradise.

Ohio was on the point system that year. As soon as the birds started flying that morning we saw there were green-winged teal aplenty. We were sharing the same blind, but birds were passing a second one about 150 yards to the east as much as they were flying over the one Ed and I were in.

"Let's concentrate on these teal, Nick," Ed suggested. "They're only ten-point birds. To improve the chances for both of us to get our share of shooting, I'll move down to that next blind."

By noon we had both limited out — with nothing but those succulent tasting and extra fast flying greenwings — 10 apiece! What an introduction to waterfowling that would have been for The Honey Badger. I swore then I'd never leave him at home again if ducks were on the agenda, and I haven't.

I've returned to Moxley's each November since, with Honey, of course. It's always good shooting, usually limit shooting; not that that's so important, but lots of action is great for dogs. Their satisfaction shows on their faces and in their antics every time they make another fetch.

### Goose Handle

Honey has also made four trips to Remington Farms on the Eastern Shore of Maryland. Here the action is mostly for Canadas, and the first few times this yellow Lab couldn't figure out how to get a hold on the "goose handle." There have been plenty of ducks to fetch at Remington's showplace as well.

Then there was the time he didn't stay steady to shot as we floated a meandering Pennsylvania creek for wood ducks. On rounding the umpteenth bend there, finally, was a duck. Or to be exact, a duo, the drake in all his colorful magnificence, the hen more drabbish. They were on the wing before I could set the paddle down, and Honey was leaping from the boat about the time the gun recoiled. How the Sports-pal ever stayed right side up, I'll never



**WHILE** admiring his bag, a couple of mallards, this hunter is probably also admiring his retriever's performance in bringing the birds to hand.

know. The 5s were definitely far to the drake's port. Stern words followed once I dragged the retriever back into the canoe by the scruff of his neck. His penance was long minutes of sorrowful, apologetic eyes.

Then there were the many mornings I heeled him from the car, back toward the headwaters of a flood control dam not far from my western Pennsylvania home. When the Army Engineers had the water backed up it always flooded a couple of hundred acres of what then became marshland. My game plan was to be sneaking along one edge of the marsh at the first hint of legal shooting time, Honey at my side. We'd ease along as darkness lost out to light, hoping to flush a mallard, a gadwall, a woodie, any duck really, out of the flooded grass. When successful, Honey would never wait for the command to fetch. When he saw a bird going down, he was off like Man O' War.

We'd hunt the perimeter of that marsh. It'd take 60 to 90 minutes, moving slowly, crouching into the marsh grass and calling whenever I saw ducks

on the wing. Back at the start-point of the morning's hunt, I'd quicken my pace for the pickup. There I'd exchange Honey for a pointing dog and go looking for woodcock in the alders surrounding the duck marsh. Those were great days, involving combinations of dogs for a combination of birds, and I can still enjoy this unusual hunting.

It's when one of our gun dogs becomes an old-timer that we begin reflecting on how lucky we are to have him, begin appreciating him for his good points, ignoring his faults as we hope he ignores ours, and begin giving thanks to the Red Gods for having been so blessed. Because I get far more excited about upland birds than I do about waterfowl, Honey hasn't enjoyed as many days out of his kennel as he would have had he been owned by a waterfowling purist. Still, he could have done worse. Because I'm in the business I'm in—outdoor writing—I get out often.

On some trips, the ones that involve flying, I haven't been able to take this funny faced but alert looking Lab. Many mornings in the marshes around Barranquilla, Colombia, I've longed to have him in a blind the natives hacked out with their machetes. Blue-winged teal are so numerous there it defies description, and there are no other hunters except the few in your party. Because the vegetation is always thick in this area, some ducks are inevitably lost. Honey would help prevent that.

### **In Far-Off Pennsylvania**

Last September I took advantage of Tennessee's unusual early wood duck season. We weren't able to use dogs. My host's Lab wasn't accustomed to the cutting sawgrass at Reelfoot Lake, and Honey was in far-off Pennsylvania. Again, a few ducks were lost. I longed for the scenting powers of a dog that might be able to handle this tough situation.

River hunting, especially if there is significant current, is among the most demanding on retrievers. A dog with special smarts can make almost impos-



sible retrieves, but one that doesn't use his head can easily make even average fetches impossible. I've never hunted Honey much around moving water, so I've always wondered how he'd have matched up with others I've seen in such circumstances.

I'd never claim Honey was all heart, that he'd stop at nothing to make certain no bird escaped, that he had a toughness that set him apart from his peers, that his nose was comparable to the very best or that he used it flawlessly. What Honey has been is simply a good hunting dog. He has plenty of holes, just like his master. But he tends to get the job done.

Isn't this the type of retriever that so many of us have? They're not field trial champions. They don't make 200-yard blind retrieves along a perfectly straight and narrow path. They don't come back with the bird every time they go out of sight. They balk occasionally. Even though they hit the water hard four times out of five, they usually tiptoe in when we most want to show them off. They don't hup to the whistle every time they hear it toot. Occasionally there's a tooth mark visible on a breast at plucking time. Mine has even broken to shot on a number of falls. How about yours?

We're all accustomed to reading about gun dog greatness, but how about gun dog mediocrity? This is what most



**ED MOXLEY didn't get to hunt with Honey at the first opportunity, but each November since, Nick's taken Honey to Ed's piece of marsh near Sandusky, Ohio for some fast and furious duck hunting.**

gun dogs are—mediocre. Like most of their owners. There's not a thing wrong with mediocre gun dogs. That's what Honey has been. That's the type of dog most all of us own at any given time. But properly bred and properly trained, even a mediocre gun dog is a source of endless pleasure, and this type of dog tends to get the job done. What more could we possibly ask?

---

## Trappers Rendezvous

The 48th annual Pennsylvania Trapper's Association Rendezvous will be held June 14–16 at the Fayette County Fairgrounds at Dunbar, between Connellsville and Uniontown on Route 119. This is a family oriented affair, with games, contests, displays, etc. Vendors and dealers should contact John Kobuchi, Rt. 2, Box 11B, West Finley, Pa. 15377 or Bob Hanes, RD5, Box 432B, Washington, Pa. 15301.

## Deer Association Photo Contest

The Pennsylvania Deer Association is announcing its third annual photo contest. Money prizes will be awarded in two categories—black and white photos and color photos (no slides). Entries must pertain to the white-tailed deer or some aspect of deer hunting other than hunters with their kills. Deadline for entries is July 1, 1985. Send entries to P.D.A. Photo Contest, Attn. Robert Seidel, 1049 E. 4th St., Birdsboro, Pa. 19508.

# DAYS OF



The squirrels around Cresson, Cambria County, probably didn't feel safe back in the 1920s when Lena Cupples was stalking the mountain.



In 1922, 265 members of the Blair County Game, Fish and Forestry Association hunted the John Dement Farm. There was three feet of snow at the time, and only one fox was taken, by Mr. Davis, a mailman. During their stay the group consumed 13 cases of baked beans and 135 pounds of weiners.

The Kr  
and Th  
Pike C



Joseph Williamson, an unknown hunter, William Grogan, Edward Nichols, George Hickman, and Charles Thompson took these bucks from the Marshalls Creek area in Monroe County in 1932.

Thomas Burtoft, Turtle Creek, took the 7-point on the left in Elk County in 1945. The other deer is a 17-pointer shot by Melvin Miller, McKeesport, who's not pictured.

This  
196  
hom  
"7  
oil

We know these hunters only as the Langfitt hunting party who gathered at the Langfitt homestead, Beaver County, in 1908 when this picture was taken.





# YORE



Thaddeus E. III, William J., Charles, Manuel E., took these bucks from Promised Land, in 1939.



came from a post card dated Dec. 4, (bearing a 1¢ stamp) sent by Frank Bilgott, to John Price with the message, "Four luck the first day, got 12 the second. What luck did you have?"



Edgar Queer, Shanksville, is posing here with his daughter Donna and his 1948 furtake: 86 muskrats, 17 raccoons, 17 skunks, 11 opossums, 6 mink, 3 fox and 3 weasels, for which he received \$250. Some years Edgar caught more fox and more mink, but this was still one of his best years.



Earl Peterman, Nordmont, and Olly Carmody, Harry "Bud" Kessler, Lou VanGilder and Jim Koons, all from Danville, took this 345-pound bruin from Sullivan County in 1939.

Allegheny County farmers Charles Hubstenberger, Herbert Elder, Michael McCauley and Ernest Hubstenberger are posing here for a Pittsburgh Press photographer after each connected in Potter County during the 1936 season.





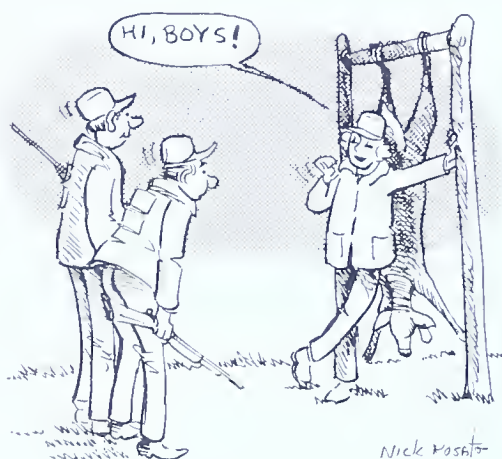


# FIELD NOTES



## Big Business

**NORTHAMPTON COUNTY**—Many area sportsmen's clubs are now making plans for their 1985 Hunter Education Programs. We are indeed fortunate to have such dedicated instructors. In this county we teach approximately 1000 students a year, and this year we plan to have nine new instructors involved. —DGP Richard W. Anderson, Nazareth.



## Our Kind of Gal

**CLEARFIELD COUNTY**—When William McCahan and his son Billy went to Ice Mountain for the past antlerless deer season, they left 14-year-old Amy Sue behind because of the snowy weather. Undaunted, Amy Sue hurried home from school and went out with her mother. Not far from their home, she promptly shot a large doe, her first deer. After tracking the wounded deer, pausing only to examine a large bear track in the snow, they found it a half-mile from where it was shot. An uncle was summoned and they had the animal on the deer pole when the mountain hunters returned — empty-handed. —DGP Jack Furlong, Ramey.

## Is This Legal?

Food & Cover Foreman Wayne Wall has had some unexpected company while bulldozing reverting fields on SGL 252. Every day by mid-morning, a sparrow hawk perches on a nearby tree and waits until the bulldozer flushes a mouse out onto the cleared ground where the hawk has an easy catch. After an hour or so of easy living, the hawk just watches the operation until mid-afternoon, then he sails off to parts unknown until the next morning. —LMO Ken Zinn, Jersey Shore.

## Help Us Out

**ADAMS COUNTY**—As GAME NEWS readers you are most likely interested in hunting, trapping and the conservation of our commonwealth's abundant wildlife resources. Most likely you are also aware of the culmination early this year of undercover work which resulted in the arrest of many individuals involved in the illegal taking and commercialization of Pennsylvania's wildlife. If you were among those who were concerned enough to report illegal activity to your local game protector, may I compliment you and encourage you to continue doing so. But if you were among those who knew firsthand of illegal activity and failed to report it, may I express my disappointment in your lack of concern. If all of you would work together with us as a team and truly support the SPORT Program, I don't believe poachers would stand a chance. Our wildlife resources need and deserve support from all of us. —DGP Lawrence D. Haynes, Gettysburg.



## Slow Learner

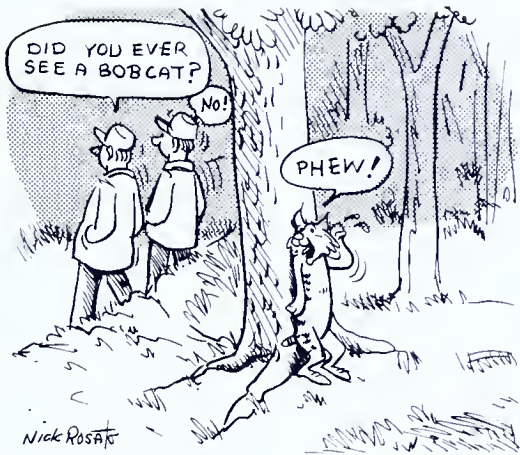
**MONTGOMERY COUNTY**—Deputy Ronald Staffieri apprehended a man last season for trapping violations. The year before, this same violator paid over \$900 in fines and had his hunting and trapping privileges revoked for three years for trapping fox and raccoons prior to the open season. The trapper pleaded guilty to the five charges filed this year, and by field acknowledgement paid \$2400 in fines to the Game Commission. In the past six years this man has been fined fifteen times for trapping violations. — DGP William Wasserman, Montgomeryville.

## Big Day

**SOMERSET COUNTY**—On the morning of last day of buck season I met Harold Fosbrink, Scottdale, who was driving deer for his son on a nearby Game Lands. Harold had killed his buck during the first week and said he had almost stayed home this day, but his son talked him into coming along. I met Harold again late in the afternoon and he said it was one of his best days afield. He had done a lot of walking and was tired, but he had seen three legal bucks and only hoped that one of them had crossed his son's path. — DGP Daniel W. Jenkins, Somerset.

## Split Duties

**SCHUYLKILL COUNTY**—I recently called another game protector for some information about a warrant. His wife answered the phone and said her husband was out. We talked for a minute, then she said to hold on, that her husband had just come in. I recognized his low businesslike voice immediately. After we had exchanged information—he told me everything I needed to know but added nothing extraneous or personal—I told him that I would rather talk to his wife because she was a better conversationalist. “In this family she’s the conversationalist,” he said. “I’m the conservationist.” — DGP Larry A. Olsavsky, Tamaqua.



## Protection's Working

**POTTER COUNTY**—I learned of several large bobcats being released from fox traps in this area during the past season. After talking to several other game protectors in the North-central Region, I found they had released several also. The wildcat population is really on the upswing here. More people don't see them because bobcats are nocturnal and extremely shy. — DGP Ron Clouser, Galeton.

## One of the Good Examples

**McKEAN COUNTY**—John Pierce and his son were hunting near Clermont when John was lucky enough to get a 6-point. When he approached the deer his son saw another buck run over and fall. Mr. Pierce backtracked the second deer and found a Mr. Lowery who, as it turned out, had shot the deer but could not find it. I learned of this episode when Mr. Lowery wrote me to say how impressed he was that a sportsman he had never met before had been courteous enough to help him locate a deer rather than claim it for his party. This is just one of several instances that lead me to believe the vast majority of hunters are fine sportsmen who would have done the same. It's just that only rarely does anyone take the time to tell me about the good eggs; I'm more likely to hear about the few rotten ones. — DGP John Dzemyan, Smethport.

## Don't Forget

**INDIANA COUNTY**—If last year's muzzleloader regulations caught you by surprise and you failed to purchase your muzzleloader stamp prior to September 30, don't feel like the Lone Ranger. I know of a game protector from the southern end of the county who also missed the deadline. It's funny how those deadlines creep up on a person. —DGP Mel Schake, Indiana.



## Honest Mistake

**GREENE COUNTY**—During the past muzzleloader season, Deputy Doug Kerr noticed a "deer" hanging behind a residence. He made a routine check and then returned with a red face, mumbling something about "skinned hogs don't have to tagged." Just for the record, Doug—we've all made the same mistake. —DGP Robert P. Shaffer, Carmichaels.

## Looking Ahead

**BEDFORD COUNTY**—To maintain and enhance the quality of hunting, the Commission is requesting an increase in license fees. Most of the sportsmen I've spoken to support this increase, stating that they have had it good and owe it to the younger generations to see that they too can enjoy the same quality of hunting and outdoor experiences. —DGP Timothy C. Flanigan, Manns Choice.

## The Agency's Strength

**WAYNE COUNTY**—Some day I might understand why men become deputy game protectors. They all work countless long hours for little or no compensation, and most Game Commission programs would cease without them. So I'd like to take this opportunity to formally thank Deputies Elwood Drake and Bill Yatsonsky, each of whom has given more than thirty-five years of volunteer service to the state's citizens and wildlife. —DGP Donald R. Schauer, Honesdale.

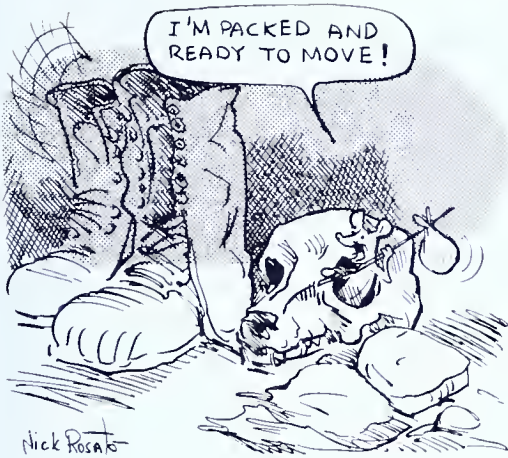
## Sorry

**LUZERNE COUNTY**—Prior to the day wildlife officers began serving warrants and citations associated with the huge illegal wildlife market investigation, all the officers were given a list of seven phone numbers at the Harrisburg Headquarters. We were to use these numbers to report such details as when arrests were made and where suspects were being arraigned. Early on the morning of the bust, I called one of the numbers and proceeded to provide the details of an arrest a U.S. Fish and Wildlife Service officer and I had just made. After a few moments of silence on the other end of the line, the person asked who I wanted to talk to and the phone number I had dialed. After I told him, he replied that I didn't have the Game Commission office, but had reached the Governor's residence. I apologized and hung up. I just hope I didn't wake the Governor. —DGP Edward Zindell, Wilkes-Barre.

## A First

**CRAWFORD COUNTY**—This past January land manager Keith Harbaugh saw the first coyote ever seen in Pymatuning Lake area. It was spotted inside a wildlife propagation area. —DGP Dave Myers, Linesville.





### Crowded Quarters

**CLEARFIELD COUNTY**—While packing to move to a new home I discovered where a mouse was storing bits of dog food in the cavity of a bear skull in my basement, where a flying squirrel was hoarding nuts in my attic, and where a rabbit was living in the culvert under the driveway. I think this shows how animals can adapt to living with man and yet remain unobserved. But more so, I think it shows that if we provide only some of the basics, such as food and shelter, in an out of the way area on our properties, we can do a lot for local wildlife populations. — DGP Don Zimmerman, Drifting.

### Not All Bad

**WESTMORELAND COUNTY** — Deputy Bob Schlemmer, Murrys ville, had quite a summer trapping skunks. Most people don't appreciate the value of having skunks around, but Bob tells me people should think twice before having them removed. The Schlemmers were having trouble with yellow jackets in their flower garden, then one day Bob noticed that one of the nests was dug up and the yellow jackets gone. That evening, as Bob watched from his patio, a skunk waddled up to the remaining nest and, ignoring the yellow jackets, dug the nest up and ate all the yellow jacket larvae. Problem solved, thanks to Pepe la Pew. — DGP Barry K. Moore, Saltsburg.

### The Right Approach

**VENANGO COUNTY**—In February I received a call from a woman who reported three hawks attacking the songbirds at her feeder. All she wanted to know, much to my surprise, was what she could feed the hawks in order to keep them from the songbirds. Now that's what I call an equal opportunity feeder.—DGP Len Hribar, Senaca.

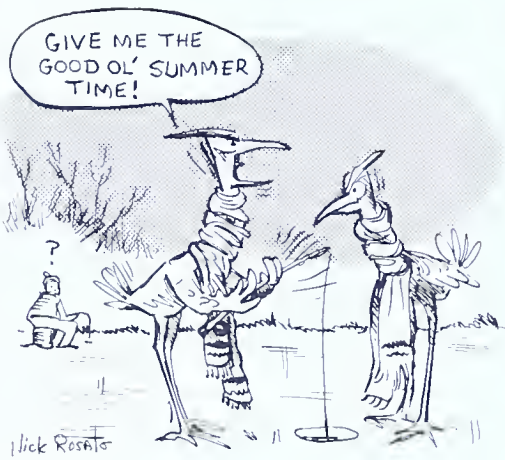
### In the Brush

**ELK COUNTY**—I was amazed at the number of deer we saw while flying over the elk range for our annual elk survey. The stands of maturing timber often appeared abandoned, but I saw many more deer than I ever expected to see in the recently clearcut areas. — DGP Harold Harshbarger, Kersey.



### Most Important

**CENTRE COUNTY**—While the deputies and I were going over hunting license applications at the Scotia Range, we became impressed with the many occupations of our hunting public. They varied from janitor to clergyman, laborer to plant owner, and student to judge. We all agree the most impressive of all occupations listed was "Domestic Executive"—what else but a Pennsylvania housewife. — DGP Joe Wiker, Port Matilda.



### Just Fishin'

**ERIE COUNTY**—While censusing deer on Presque Isle State Park in January, I was surprised to see seven bucks still carrying antlers. I was even more surprised, however, when I counted 21 great blue herons standing on the ice, competing with the ice fishermen on the bay. —DGP Andy Martin, Erie.

### Protecting You, Too

**PIKE COUNTY**—Once again the seriousness of having a loaded firearm in a vehicle was made all too apparent to me. Two local residents were hunting deer from a vehicle, on a Sunday during the closed season. After spotting two deer standing along a back road, the driver attempted to load his 270 so the passenger could shoot from the window. The rifle accidentally discharged, sending a bullet through the passenger's lower left leg and on through the floorboard of the car. The victim suffered permanent damage to his leg and will require many months of hospitalization and rehabilitation. To say he will never be the same is putting it lightly. The driver will also suffer the consequences of his irresponsible act. This incident illustrates exactly why we're so concerned when we catch someone with a loaded firearm in a vehicle. —DGP Robert D. Buss, Hawley.

### Due Recognition

**FULTON COUNTY**—Conservation District Manager Carolyn Hollinshead was recently presented with a 1984 Working Together for Wildlife print, "Dutch Country Bluebirds," in recognition of her many accomplishments in wildlife conservation. Carolyn has conducted many environmental programs in the county and has been instrumental in establishing the Envir-Olympics contests which are becoming quite popular throughout the state. Congratulations, Carolyn, and thanks from all of us who care about our environment. —DGP Mark A. Crowder, McConnellsburg.

### Eighty Percent

**ARMSTRONG COUNTY**—While working at the Game Commission exhibit at the David L. Lawrence Convention Center in Pittsburgh, I was especially pleased to find about four out of five sportsmen I talked to were in favor of the Commission's proposed hunting license increase. They thought the Game Commission was doing a good job and could understand the need to raise fees. It made me feel good to learn that the majority of sportsmen here believe in what the Commission is doing to protect and manage our wildlife. —DGP Barry J. Seth, Worthington.

### The Plan

**CHESTER COUNTY**—We had two confirmed sightings of bald eagles in my district in January. One was of an immature bird, the other of an adult. With the Game Commission's eagle restoration project off to such a successful beginning, eagle sightings should become more common in years ahead. Ten years from now these majestic birds might be so common that confirmed sightings will be an everyday occurrence. At least that's our goal. —DGP Keith P. Sanford, Coatesville.



# 2nd Best Season For Archers

By Ted Godshall

PGC Information Specialist

**P**ENNSYLVANIA archery deer hunters had their second best season in 1984, according to report cards filed with the Game Commission. Archers reported taking 6709 deer last year, down slightly from the previous record, 7264, set in 1982. In 1983, the figure was 6342. The 1984 harvest was about evenly split between antlered and antlerless deer, a long-standing pattern among archers.

Flintlock hunters reported taking 2964 whitetails in 1984, up slightly from the 2813 reported taken in 1983. More than 90 percent of the deer reported by muzzleloaders are antlerless.

Archers returned cards last year for 3577 bucks, including 2902 with 3 or more points and 675 spikes. The antlerless deer report total was 3132. Compound bows were used by 5525 archers, while 1184 used recurve or long bows.

Potter was the most productive for archers, who returned 307 cards for deer taken in that county, two more than the preceding year. Other leading counties included Berks, 289; Schuylkill, 285; Bradford, 223; and Butler, 199. See the state map on the next page for county by county totals.

Last year resident archers reported 5782 deer, including 3245 bucks and 2537 antlerless. Nonresidents reported taking 332 bucks and 595 antlerless deer, for a total of 927.

The archery harvest includes 6316 cards received from successful archers during the October season, and 393 for the extended season. The largest number of cards filed for a single day, 1227, came from deer taken on Saturday, October 6, while the second highest total, 471, came on the second Saturday, October 13.

Muzzleloaders returned cards for 224 antlered deer, including 111 with 3 or more points, and 113 spikes. Antlerless deer report cards totaled 2740.

The largest number of cards from successful flintlock hunters, 164, came from Schuylkill County. Following were Luzerne, 140; Clearfield, 119; Somerset, 117; and Venango, 105.

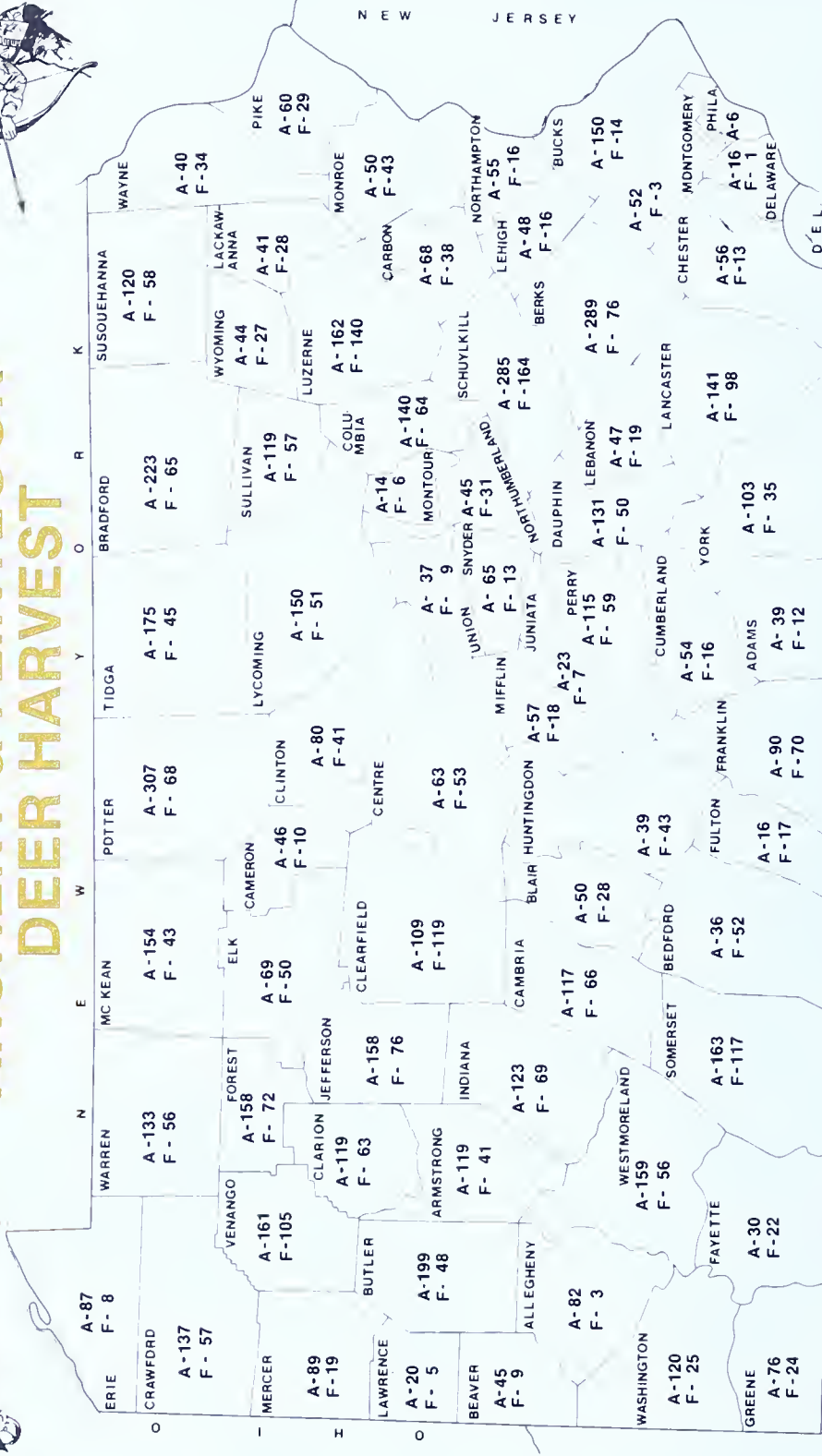
Resident muzzleloaders reported harvesting 2723 deer, including 205 bucks and 2518 antlerless whitetails, while nonresidents returned cards for 241 whitetails, including 19 antlered deer and 222 antlerless whitetails.



**MIKE BRAVIS**, Latrobe, took this 145-pound 15-point with a 16-inch spread on October 6, 1984—the most productive day for the state's archers last year.

1984

# ARCHERY & FLINTLOCK DEER HARVEST



ARCHERY (SYMBOL-A)		FLINTLOCK (SYMBOL-F)	
ANTLERED	3,507	ANTLERED	220
ANTLERLESS	3,067	ANTLERLESS	2,670
COUNTY UNKNOWN	135	COUNTY UNKNOWN	74
TOTAL	6,709	TOTAL	2,964

GRAND TOTAL ARCHERY HARVEST	6,709
GRAND TOTAL FLINTLOCK HARVEST	2,964



# Hunting-Trapping Fees Among Lowest

**A** RECENT survey confirms that Pennsylvania resident hunting and trapping fees are among the lowest in the nation. The survey contradicts claims that the Game Commission's proposed new license fees are exorbitant and out-of-line with other states.

Of the 49 states polled (Hawaii was excluded), Pennsylvania now ranks 46th. Only Delaware, West Virginia and Louisiana fees are slightly lower. However, wildlife law enforcement in Delaware and West Virginia is subsidized from general tax appropriations, and Louisiana's Wildlife Department reports serious financial difficulty with no funds to develop and maintain their public hunting lands. Delaware and Louisiana both have license-increase bills before their legislatures.

The nationwide average cost for residents to hunt and trap is \$56.50. That's \$37 above Pennsylvania's current rates, and \$1.50 above what it would cost to hunt and trap in Pennsylvania if recommended increases are approved.

Based on proposals now before the Legislature, residents would pay \$55 to hunt upland game, deer, bear, turkeys, migratory birds and waterfowl, and to hunt and trap furbearers.

Commenting on the survey, Game Commission Executive Director Peter Duncan noted, "While it's true some states permit hunters to take several deer per season, it's also a fact they do not have more than a million resident hunters competing for available resources as we have here in Pennsylvania."

On the proposed new furtakers license, Duncan noted that Pennsylvania is currently one of only four states without a separate trapping license. The nationwide average cost of a license

to take furbearers is \$16.50. The Game Commission has proposed a \$15 furtakers license.

Duncan defended the Game Commission's license increase proposals by pointing to the fact that adult resident fees have not been increased since 1973, although the agency was faced with double-digit inflation for more than a decade.

Game Commission officials are hopeful Pennsylvania sportsmen will review the survey results and recognize that hunting and trapping fees in Pennsylvania, based on national averages, are extremely low.

Duncan again reminded sportsmen that, as a practical matter, it is impossible for the Game Commission to



**RON PEARCE**, Rossiter, took this 10-point with an 18-inch spread in Indiana County last year.

State	General Hunting	Deer	Archery	Muzzleloader	Bear	Turkey	Public Lands	Trapping	Waterfowl	Bird Permits	Total
Alabama	\$10.00						\$ 3.00	\$7.40			\$ 20.40
Alaska	12.00							10.00	\$ 5.00		27.00
Arizona	9.50	\$14.50			\$ 7.50	\$ 8.50		\$50.00			90.00
Arkansas	10.50							7.25			23.25
California	14.00	4.25			7.50			40.00	5.50		73.25
Colorado	7.50	17.00	\$17.00	\$17.00	25.00	7.50		30.00	7.50		121.00
Connecticut	9.00	10.00	5.00	10.00		10.00		16.00		5.00	65.00
Delaware	5.20								5.00		10.20
Florida	11.50		5.00	5.00				25.00	3.25		49.75
Georgia	6.50	5.50	4.50				10.25	10.00			36.75
Idaho	6.50	8.00	5.50	5.50		6.50		25.50			57.50
Illinois	7.50	15.00	15.00			15.00		9.50			62.00
Indiana	6.00	10.00				12.00	3.00	6.00	5.00		42.00
Iowa	8.50	20.00				20.00	3.00	15.50	5.00		72.00
Kansas	9.00	30.00	30.00			20.00		15.00			104.00
Kentucky	7.50	11.00				6.50		11.50			37.00
Louisiana	5.50	5.50	5.50					2.00		5.00	18.50
Maine	13.00		13.00					27.00	2.50		60.50
Maryland	10.00	5.50	1.25	1.25					11.50		29.50
Massachusetts	12.50		5.10		5.00	5.00		20.50	1.25		49.35
Michigan	7.25	9.75	9.75		11.25	7.25	2.00	11.25	3.75		62.25
Minnesota	11.00	15.00	15.00		15.00			13.00	3.00	5.00	77.00
Mississippi	13.00		7.00					25.00	2.00		47.00
Missouri	6.00	8.00	8.00		8.00	16.00		6.00	3.00	2.00	49.00
Montana	2.00	9.00	6.00			3.00		20.00		4.00	52.00
Nebraska	8.50	20.00	20.00			15.00	7.50	15.00			106.00
Nevada	13.00	15.00		20.00							
New Hampshire	11.25		11.00	15.00				20.00	2.00		65.00
New Jersey	18.50	10.00	20.25	10.00				24.00	4.00	10.00	70.25
New Mexico	22.50	19.00						27.00	2.50	18.75	102.00
New York	8.50	8.50	5.25	5.25	10.50	2.00		10.50	9.50		82.50
North Carolina	11.50	8.00		8.00			9.00	8.50			38.00
North Dakota	9.00	19.00	18.00			5.00		7.00			58.00
Ohio	7.75	10.75	10.75			10.75		5.75	5.75		40.75
Oklahoma	7.50	10.75	10.75	10.75		5.75		10.75	4.00		60.25
Oregon	8.00	4.00			5.00	5.00		10.00	5.00		37.00
Pennsylvania	8.50		2.50	3.50	5.00						19.50
Rhode Island	6.50	7.50	7.50	7.50				10.00			39.00



State	General Hunting	Deer	Archery	Muzzleloader	Bear	Turkey	Public Lands	Trapping	Waterfowl	Bird Permits	Total
South Carolina	9.50	15.00	15.00			4.00	10.25	10.00	5.50		35.25
South Dakota	8.00	10.50	10.50	15.00				8.00		5.00	70.00
Tennessee	10.50	10.50	10.50	10.50			6.50	11.50	6.50		66.50
Texas	8.00		6.00					10.75	5.00	6.00	35.75
Utah	12.00	15.00	10.00	10.00	25.00	3.00		25.00			100.00
Vermont	8.00		6.00			5.00		15.00			34.00
Virginia	7.50	7.50	7.50	6.00	10.00	10.00	7.00	25.00		12.50	54.50
Washington	16.50	10.00	6.00		4.00		5.00	25.00			101.00
West Virginia	8.00	12.00	12.00		12.00	11.75		12.50	3.25		12.00
Wisconsin	7.50	15.00	5.00		25.00	6.00		20.00		6.00	71.00
Wyoming	5.00										82.00

February 20th, 1985  
Bureau of Information and Education

continue providing programs and services on 1973 license revenues.

Under the Game Commission's proposed new license structure, adult resident sportsmen would pay the following costs, which also include the issuing agent's fee.

Species	License Cost	Total
Upland Game		
Antlered Deer		
Turkeys		
Migratory Birds	\$15.50	\$15.50
Antlerless Deer	\$ 7.00	\$22.50
Muzzleloader Deer	\$ 7.00	\$22.50 (1)
Archery Deer	\$ 7.00	\$29.50
Bear	\$10.00	\$39.50
Furtakers	\$15.50	\$55.00

(1) Licensed muzzleloader hunter must surrender antlerless application.

A federal migratory waterfowl stamp is required to hunt ducks and geese.

### 1986 Tentative Opening Dates Set

For the benefit of hunters who must schedule vacations well in advance, the Commission has announced the following tentative opening dates for the 1986 seasons:

Archery . . . October 4

Early Small Game . . . October 18

General Small Game . .  
November 1

Bear . . . November 24

The 1986 antlered deer season opener was previously established as Monday, December 1.

# Information Compiled from 1984 Hunting Accident Report

Casualty		Weather Conditions			
			F	N-F	T
Fatal					
Self-Inflicted	5	Clear	9	78	87
Inflicted by others	7	Overcast	2	21	23
Non-Fatal		Fog	0	3	3
Self-Inflicted	31	Rain	1	5	6
Inflicted by others	79	Snow	0	2	2
Total	122	Not Reported	0	1	1

Sporting Arm Used				Light Conditions			
	F	N-F	T		F	N-F	T
Shotgun	1	74	75	Dawn	0	5	5
Rifle	9	27	36	Daylight	12	95	107
Revolver	0	5	5	Dusk	0	6	6
Muzzleloader	2	0	2	Dark	0	4	4
Long Bow	0	1	1				
Compound Bow	0	3	3				

Animal Hunted				Cause of Accident			
	F	N-F	T		F	N-F	T
Deer				Sporting arm dangcrous position	4	3	7
Regular Season	6	23	29	Accidental discharge	3	32	35
Muzzleloader	2	0	2	Ricoehet	0	9	9
Archery	0	4	4	Stray Shot	1	9	10
Turkey				Vietim in line of fire	1	27	28
Spring	1	5	6	Hunter slipped and/or fell	1	7	8
Fall	1	10	11	Hunter dropped sporting arm	0	1	1
Pheasant	0	13	13	Shot in mistake for game	2	21	23
Squirrel	0	12	12	Sporting arm defeective	0	1	1
Doves	0	5	5				
Grouse	0	7	7				
Woodchuck	1	8	9				
Fox	0	3	3				
Waterfowl	0	1	1				
Rabbit	0	17	17				
Raceoon	0	1	1				
Quail	0	1	1				
Chipmunk	1	0	1				

Place of Accident			
	F	N-F	T
Field	1	28	29
Woodland	8	77	85
Marsh or Bog	0	1	1
Road or Highway	2	2	4
Vehicle	1	2	3

Ages of Persons Inflicting Injury				Summary of 1984 Hunting Accidents	
	F	N-F	T		
12 to 15 years of age	1	22	23	FATAL	12
16 to 20 years of age	1	22	23	NON-FATAL	110
21 to 50 years of age	7	42	49	TOTAL	122
Over 50 years of age	1	10	11		
Not Reported	2	14	16		

**NOTE:** Average years hunting experience per offender is 12 years. The total of 122 accidents is the lowest number since 1923, when 106 accidents were recorded, 55 of those being fatalities. In 1923 there were 499,544 licensed hunters, compared to 1,300,000 in 1984. The safety color fluorescent orange was not visible to the offender in any of the mistaken for game hunting accedents.



# Commissioner Brooks Resigns

**E.** J. BROOKS of Lansdale has retired from the Game Commission after fifteen years of devoted service to the agency and nearly a lifetime of dedication to the cause of wildlife conservation and management.

Brooks served as president of the Commission for three years and was responsible for creation of the executive committee, serving as its chairman for many years. At the time of his retirement, he was chairman of the budget and nominating committees.

The retired commissioner, president of E. J. Brooks Co. and a recognized industrial consultant in real estate, has often been honored for his service to the Boy Scouts. In 1977, Brooks received the Pennsylvania State Award given by the Philadelphia Federation of Sportsmen's Clubs for most outstanding service to Pennsylvania sportsmen.



Edwin J. Brooks

## GAME NEWS

Enclosed find check or money order for \$ . . . . . for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW

☐ RENEWAL

(Check One)

ACCOUNT NUMBER

In U.S. ☐ 3 Years \$16.50

☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

GAME NEWS Binder (Holds Twelve Issues of the Magazine)

☐ \$3.50

Name . . . . .  
(print plainly)

Address . . . . .

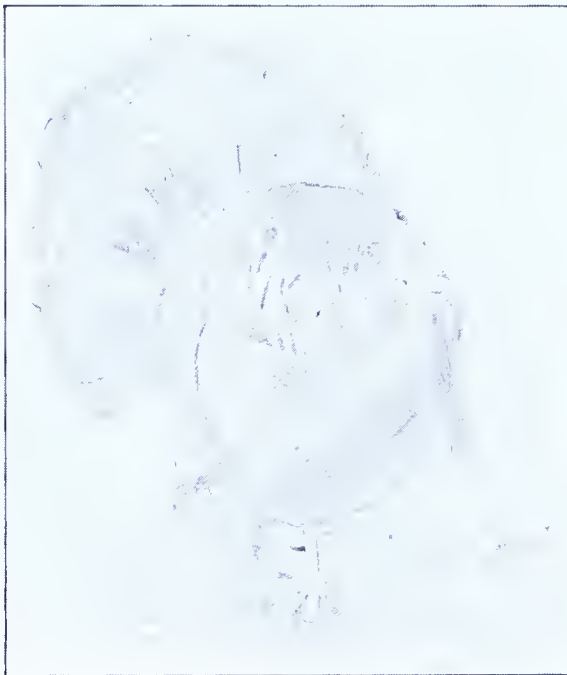
City . . . . . State . . . . .  
(Zip Code)

NOTE: All remittances should be made payable to the  
PENNSYLVANIA GAME COMMISSION

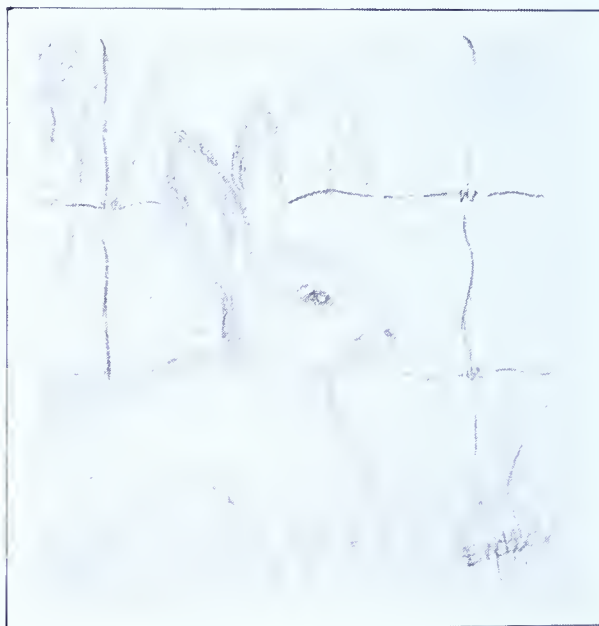
Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
DO NOT SEND CASH

Please allow 60 days for first copy.

# young artists page



**Struttin' Gobbler**  
**Matthew Bickhart**  
**Mt. Pleasant Mills, PA**  
**Middlebury High School**  
**11th Grade**

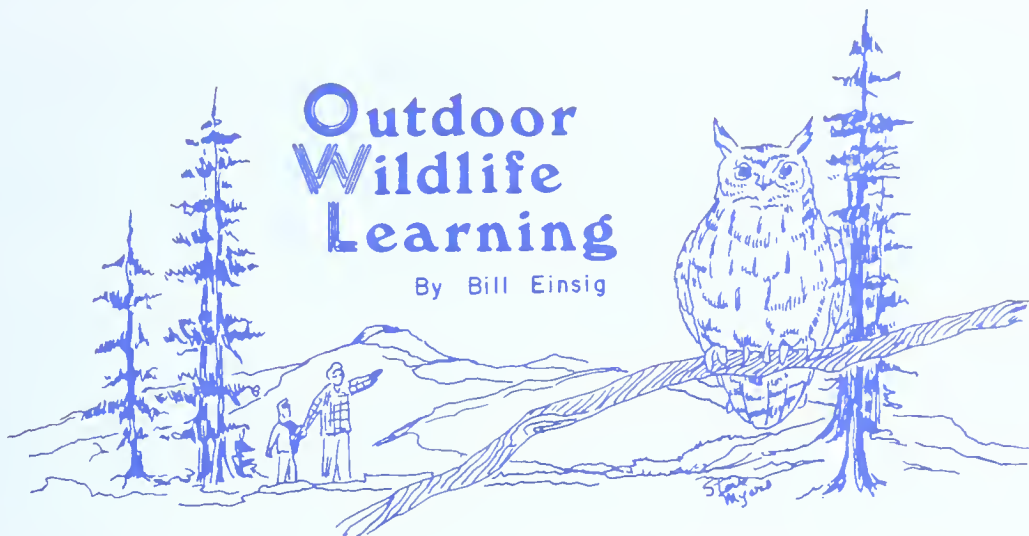


**Cottontail Rabbit**  
**Elizabeth Webber**  
**Newville, PA**  
**Big Spring Middle School**  
**8th Grade**



# Outdoor Wildlife Learning

By Bill Einsig



## Information . . .

If you needed information on the white-tail deer, black bear or ruffed grouse, your first stop would be with the Pennsylvania Game Commission. Those species are all important game animals and have been studied by Commission wildlife biologists for many years.

But what if you needed information on species not found in Pennsylvania? Where would you look, for instance, to get help with alligators, lobsters or mule deer? It's not likely that any Pennsylvania agency would spend much of its budget on species that don't live in our own state.

However, there are state wildlife agencies in all fifty of the United States, and those agencies are responsible for the management of species found within their borders. They probably have some of the same kinds of information available on their species as we have on Pennsylvania's.

Several months ago, I contacted the information offices of several states just to see what kinds of literature, films and other materials they supply for the general public and teachers. I understood that budgets are typically tight and that certain restrictions might apply to requests from nonresidents. I also understood that some items were probably free while others might carry a nominal cost. I avoided asking for "a copy of everything" or using the all too familiar "send me all you have . . ." request.

Four states responded to my letter, but not all included what I hoped to receive. One state simply returned my letter with a neatly typed note that said, "We cannot afford to supply our materials in the quantities we would like to to (our own) teachers. We really don't want them publicized as

available out-of-state." Interesting.

I'm certain there are other states with such austere restrictions, and it seems easy to blame low budgets. However, when a requester is willing to pay a reasonable cost to cover postage, handling and a modest profit, that attitude is tough to defend. After all, public education is a long-term investment that needs to be cultivated among any audience available. Environmental and management concerns aren't restricted by political boundaries.

The remainder of the states were very helpful. Most included price lists and a description of the kinds of literature they have available. Most did not include sample copies. Here is a brief overview of what a few states have to offer:

California Department of Fish and Game, 1416 Ninth Street, Sacramento, CA 95814.

The California Fish and Game Publication Price List includes wildlife leaflets on nearly 100 different species. Most of these are common to Pennsylvania but some are not. Leaflets are available on wild pigs, condors, leopard sharks, tarantulas and many more. California residents can get single copies of leaflets free but the rest of us have to order in bulk (25 minimum) at 4 cents each.

The price list also describes species booklets which include more detailed accounts of the natural history, distribution and habits of selected species. Some titles include *Furbearers*, *Upland Game* and *Trout*. These vary somewhat, but generally are less than \$2 each.

One general area of information should be of great interest to teachers. California lists more than 250 endangered or threatened species of animals and plants. A number of leaflets and booklets touch

## Cover Story

Woodchucks are often seen lolling away the warm days of May along fencerows, roadsides and woodland borders. In the preceding months they were busy having young and replenishing the fat reserves that sustained them through hibernation. In the coming months, after the lush fields now providing shelter are cut, they'll be busy avoiding hungry foxes, zealous dogs and anxious hunters.

on those problem species. In addition, the November-December issue of "Outdoor California," their agency magazine, included several good articles on endangered species. One article by Bob Mallette gives detailed descriptions of 20 endangered California birds and points out the most likely places to see them.

Florida Game and Fresh Water Fish Commission, Farris Bryant Building, Tallahassee, FL 32301.

Florida produces only a limited number of brochures. However, all are free. They are available only as single copies and may be reproduced without restrictions. Some of the most interesting titles include the "Florida Deer Story," "Florida Panther," and "Florida Venomous Snakes."

In addition to these general brochures, Florida has a more extensive listing of technical reports that have been published in wildlife journals. They provide reprints on request as long as supplies last. Most of these would be useful for classroom work and student research at the high school level. For instance, there are a number of reports on alligators alone — "Two Incidents of Alligator Attacks on Humans in Florida," "Nuisance Alligator Control in Florida," and "Public Opinion About Alligators in Florida."

Florida also has several other methods of helping teachers. They offer an impressive series of slide programs available only to Florida schools. Slide programs have tremendous advantages over 16mm films. They are much more flexible, more easily updated, and significantly less expensive to produce. They become especi-

ally valuable when they focus on local problems or native species. We could use more of these in Pennsylvania.

Florida Game and Fish also offers a special musical program on Florida's wildlife heritage. A member of the Commission staff visits schools, fairs, and other functions to perform the show.

Finally, the Florida Commission runs its own Youth Conservation Camps for youngsters, ages 8 to 14. Almost 1700 campers attended the one-week sessions in 1984. The camp is open to out-of-state children. What a neat vacation for a kid!

Montana Department of Fish, Wildlife and Parks, 1420 East Sixth Avenue, Helena MT 59620.

Montana supplies slide programs and films to anyone who asks. They are available to nonresidents, but residents get first choice and most are booked well in advance.

Among the other printed materials available from Montana are full-color slick booklets on the identification of various animal groups. I received three: *Upland Game Birds*, *Game and Sport Fishes*, and *Big Game Animals*. There may be others.

A letter from Vince Yannone of the Montana Conservation Education Division accompanied my packet of materials, and he made a point that impressed me. He said that one of the major problems in Montana is the development of wildlife habitat. The development of coal and gas deposits in eastern Montana has already affected the habitat of deer, antelope and elk.

Most of us know that loss of habitat is the most crucial problem facing wild plants and animals around the world. We also know that our demand for energy continues to grow, and that energy rich states such as our own and Montana will have to face conflicts between what we want and what wildlife needs. There's no better way to teach about these conflicts than to get good information as direct from the source as possible.

If you're interested in any of the information mentioned in this column, contact the appropriate state agency and ask for a price list. When you order, be specific, use catalog numbers, accurate titles, and follow all directions for ordering.



**M**AY is the month of dual activities for the sportsman. In the morning we see him up before dawn dressed in camouflage clothing, carrying a shotgun in hopes of calling in a spring gobbler. In the afternoon he is working a stream with his fly rod. And nearby coltsfoot is in bloom and color is at last beginning to return to Mountain Country. It's a wonderful time to be outdoors.

*May 1*—The deputies and I have been receiving reports about unusually aggressive behavior on the part of one particular bear in the vicinity of Four Mile and Sizer Run roads. The bruin, which has been named Rubin by some of the locals, has been fed for several years. We have repeatedly warned those involved, stressing the potential danger of this activity. Our advice has gone largely unheeded and now the inevitable is in sight. The bear has been charging people, sending them fleeing for the safety of their automobiles.

In an effort to head off the impending disaster, we are on location this evening with the dart gun. It is loaded with the proper dosage to immobilize a 300-pound bear, and the 12-gauge police shotgun with rifled slugs is ready as a safety precaution. Everything goes textbook perfect. Almost everything, that is. Charlie Baker does a splendid job of baiting the bear right in front of me. I have to make only a 10-yard shot. The dart is delivered right on target but the bear doesn't go down.

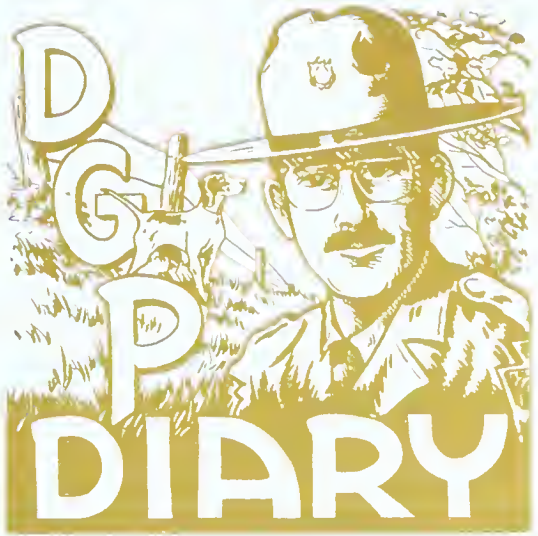
*May 3*—I receive my second bear complaint of the year from Louie Slyder and set the trap in the usual place near his barn.

*May 4*—Mr. Slyder calls this morning to inform me we have caught the bear. It is the second bear trapped at the Slyder residence this year, the fifth in two years.

*May 5*—I patrol this morning for spring gobbler hunters.

*May 8*—I attend a Rotary meeting this noon and in the evening present a slide tape program to a group of Boy Scouts. It's from the Wild Turkey Federation and deals with defensive spring turkey hunting.

*May 10*—Shortly before noon I receive a phone call from Deputy Waterways Conservation Officer Gary Brown. He has been



**By Joe Carlos**

**District Game Protector  
Cameron County**

given a tip that some trout fishermen have been taking over the limit of fish, hiding them along the bank, and then picking them up on their way home at the end of the day. The informant also described the fishermen's car. Since WCO Hastings is tied up at the other end of the county with fish stocking, I meet Gary to assist him.

As the hours drag on we are joined by Deputy WCO Tom Shields. Finally, we spot the vehicle coming in our direction, stop it, and search thoroughly for fish. Either our informant is mistaken or the fish haven't been biting, because they are well below the allowable number of trout. I spend approximately 4 percent of my working time assisting other agencies, mostly the Fish Commission.

In the evening we are back after Rubin. Gary Brown stays to help and we have asked elk research assistant Rawley Cogan to try his darting equipment. During the next seven hours the bear is hit with three darts but never fully succumbs to the drug. We finish at midnight, exhausted from following the bear over miles of mountainous terrain. We have learned a hard lesson about how drug resistant a bear can be.

Our two mistakes have taught us, though, and if we have to deal with this particular bear again it will be with a heavier dose. We've invested a total of 45 man-hours this evening, all as a direct result of people feeding bears. The Game Commission is in favor of making this practice unlawful. I hope the General Assembly will pass an

act to that effect before someone is killed or seriously injured.

*May 11*—This evening Rawley Cogan and I present a program on elk to a group of Cub Scouts. Rawley shows them his darting equipment and some antlers. Then he gives a radio collar to one of the scouts and tells him to hide in the woods. The remainder of the group is given the antenna and receiver and sent in search of him. It is a sophisticated game of hide and seek, one that Rawley plays for real as part of the elk study to ascertain daily and seasonal movements of this majestic animal.

The game is a big hit with the youngsters. Public relations, disseminating information, education, and attending meetings are a big part of my job, consuming 15 percent of my working hours. In the last year I worked 199 nights or evenings after 6 p.m., and a great deal of that time was spent putting on programs or attending meetings (a total of 96). I look upon this as an investment for the future, one which should pay big dividends in the years to come.

*May 12*—I patrol for spring gobbler hunters in the morning and present a turkey hunting program at the Mountain Country Sportsmen's Club in the evening.

*May 15*—I am at the Trout Unlimited meeting showing the defensive turkey hunting slide tape.

*May 16*—I assist Stan Hastings with fish stocking during the day and present the turkey program to the Bucktail Rod and Gun Club in the evening.

*May 17*—Regional Director Willis Sneath, Information and Education Supervisor Harry Merz, and Game Protectors Harold Harshbarger, Leo Milford, and I conduct a workshop at the Homestead Hotel in Emporium for Elk and Cameron county hunter education instructors. We are given a look at some new audio-visual training aids which should help us in our efforts to make the first-time hunter a safer and more ethical sportsman. Northcentral Region Outstanding Hunter Education Instructors Joe Fritz and Mike Acierno from Elk and Cameron counties, respectively, are honored with certificates for their achievements over the years. These two men have decades of volunteer service.

Their reward has been the steady decline in hunting accidents and perhaps an occasional wave from a former student.

I have found that you get just as much from the outdoor sports as you put into them. Merely purchasing an \$8 or \$12 license isn't enough for many of us. Those who participate in browse cutting, stream improvement work, seedling planting and trout stocking, or teach hunter education, are able to stretch out their sport into a year-round activity.

*May 19*—Charlie Baker, Deputy Bill Olivett, and I visit the James Haas residence this evening to process a bear damage claim and set our culvert trap. The bear, which came in during the previous night, has destroyed one beehive, leaving another untouched. The Game Commission will provide electric fencing to those individuals who have ten or more hives, but Mr. Haas, who has only two, does not qualify. He decides to erect the fence at his own expense.

*May 21*—For the third time this year we set the culvert trap at the Louis Slyder residence.

*May 24*—We have caught the bear at Mr. Slyder's, and as it is the sixth bear trapped there in two years, we are relocating it to Marienville in Forest County. While there we meet with DGP Al Pedder. I came on as a deputy under Al back in 1972, when he was assigned to Clarion County, so it is a welcome reunion with a lot of catching up to do. He and I are two of the very few game protectors who will still accept relocated nuisance bears.

*May 28*—DGP Jack Weaver calls in the morning to ask if he can relocate a nuisance bear in my district. I agree. When he arrives around 2 p.m. it is pouring down rain, so I pull my personal auto out of the garage and we back in the trap and process the bear inside, out of the rain. Then we carry the bruin out into my yard where it sleeps off the drug and eventually wanders off. Just one of the many advantages of living in the country.

*May 31*—I pick up three roadkilled deer and collect embryo data from the females. This reproductive information is an important part of the formula used to manage the deer herd and allocate antlerless deer licenses.



“I DIDN’T pay any attention to ’em till I retired. There wasn’t enough to pay attention to. When I was a kid, we had ’em on the farm, but I didn’t take much notice. Guess I was too busy catching fish.

“Whenever I went to work, I became a tree surgeon—pruning, filling cavities. I didn’t see many then, even though I was driving all over the country and spending a lot of time in trees.

“I guess it was 1977, when I read an article about bluebirds in the *National Geographic*—about how they were in trouble and all. Then I happened to see a couple of ’em out along the road. That got me started. I put up eighty boxes—made out of scrap lumber, I never paid a nickel for materials—and I had nineteen pairs nest. I kept buildin’ boxes. At one time I had 253 that I monitored myself. These days, some of the people who own the land where I set my boxes, they take care of ’em. Last year I monitored 146 boxes. Had 114 pairs of bluebirds—up around eighty percent. From what I’ve read in the books, that’s a pretty good rate.”

Melvin Lane, age 70, is a trim, lithe man of medium height, erect, and with a full head of gray hair. He lives in half of a brick duplex house on the tree-lined main street of Alexandria, Pennsylvania.

“When I started out with bluebirds, I was checkin’ my boxes three-four times a year. That takes a lot of time, a lot of drivin’. I got bluebird boxes all over the place, like spokes on a wheel, five or six routes goin’ out of town in different directions. Now, though, I’m not as fired up as I used to be; I get out in the spring and clean the boxes, and I check ’em once in May or June and again in the fall. This is the first time I’ve looked since I cleaned this spring. I don’t have the slightest idea what we’ll find.”

Mr. Lane pulls over to the side of the road and sets the parking brake. Leaving the engine idling, he gets out of his pickup and strides to a utility pole. The site is on the outskirts of Alexandria. Cars whiz by. Across the road is a Pennzoil gas station; a man at the

pumps waves, and Mr. Lane waves back.

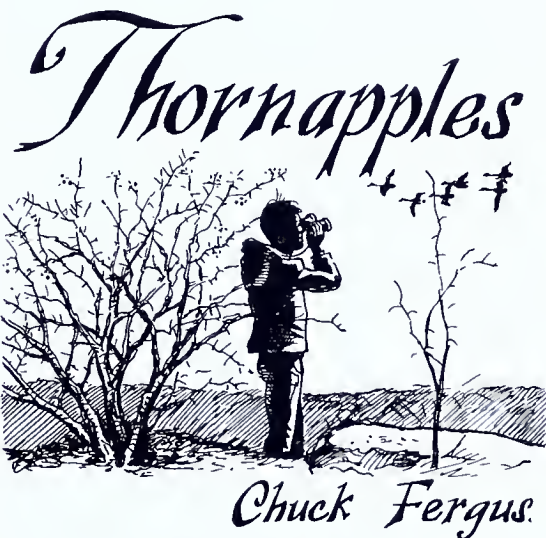
He steps in front of a wooden box nailed at breast height to the pole. The box, weathered a pale gray, is six inches square by a foot tall, with an overhanging lid and a circular hole in front. Below the hole is a stamped copper tab: BLUEBIRD HOUSE, MELVIN LANE, ALEXANDRIA, PA. Mr. Lane unwinds two long wires that extend from galvanized roofing nails in the box’s lid to similar nails, one on each side of the box. He removes the lid.

“A blank.”

Mr. Lane points to two more roofing nails, sunk in the top edge of the box’s sides; these keep the lid cracked a quarter-inch all around. “Ventilation. I cooked a few before I figured this out. Then I had to go around and change all my boxes.”

The pickup shifts smoothly through the gears, slows, turns off the highway onto a narrow macadam. The road twists among green hills.

“What caused the bluebird to get scarce was a couple of things. Pesticides—they kill insects that the bluebirds feed on, and maybe poison the birds. Starlings—they steal the cavities in tree trunks and limbs that bluebirds naturally favor. Sparrows”—the truck brakes and stops—“they kick the bluebirds out, too.”





Mr. Lane gets out. He is wearing brown trousers and a camouflage baseball cap. Nimbly he scales a steep bank along the road, his head darting back and forth as his eyes search out footholds. On top, he heads for a box.

"The boxes have a hole that's an inch and a half in diameter—no more. That keeps the starlings out." Mr. Lane opens the lid and peers in. "Nothin'."

The truck passes an orchard, pastures, a barn. "The way to discourage sparrows—that's English sparrows—is to locate the boxes away from barns. I learned that from sad experience." Broad, grassy fields, a tree-lined stream in the bottomland. The truck humps to a stop.

Mr. Lane grins. He cocks an ear, looks up into a broad-spreading oak pale with new leaves. "He's in the tree, but I can't see him." The sound is a faint, musical warble. "You'd think you could see anything in there. Can't see him at all. Well, I hear him—I know he's there." In the box, only a few wisps of grass. Winding the wires back down: "He can't find himself a girlfriend yet. Mebbe he will later on."

Mr. Lane stops the truck, cuts the engine, and trains his binoculars on a

bird sitting on a telephone line. "Sparrowhawk. She's got something. She's tearin' it up." The binoculars look small in his hands. His fingers, tanned and thick, adjust the focus. "Must be a mouse—I don't see feathers floatin'."

The truck continues on. It swings wide for a box turtle.

"I don't keep real strict figures. I get at least one hatch out of each nesting pair, on the average, each year. I probly lose half a dozen nests to coons, cats, and snakes. In about two-thirds of the boxes I get two hatches. In a good many, I get three."

The truck grinds to a stop in gravel. The box is mounted on a utility pole in the front yard of a house. A grin cracks Mr. Lane's face. "See the tracks?" He points at the box, where twin streaks of scratches mark the weathered wood, one at five o'clock to the hole, the other at seven o'clock. "Buddy, there's traffic goin' in and out of there."

Mr. Lane opens the lid, peers in, and steps aside. The nestlings are five. Their mouths strain upward, orange-red and glistening, rimmed with yellow beaks. Lines of feathers, like hairs, march down the skin of their backs. The birds fill a small cup in the compact bed of grass.

Mr. Lane puts the lid back down. He returns to the pickup, grabs his binoculars, waits.

"Here comes the male."

### Stops In Air

A drop of blue dips across the yard and stops in the air in front of the house. Blue wings windmill for an instant, and then the bird—an insect in its bill—disappears into the hole. It comes back out, flies to a wire, and perches. The bird's back and tail are a rich blue, like the zenith of the sky on a crisp autumn day. A clay-brown band crosses the bird's chest below its blue face. Head hunched into its shoulders, the bird sits solid on the perch. It raises its beak. Four notes, a soft warble, carry through the air.

"You see enough bluebirds, you get to recognize 'em. They have a distinctive



way of sitting; I think it's the way they hold their head."

A second bird swoops in. It enters the box, emerges a second later, and lands in a small tree. It has a rusty breast and a blue-gray back and head, with hints of blue in tail and wings.

"That's the female. After I recognized the profile, I realized there were a lot more bluebirds around than people thought. I knew all they needed was a place to nest."

Down the road, the next box contains two eggs and two nestlings. The eggs are white. "That's rare—mebbe one in twenty will have white eggs, the rest will all be blue."

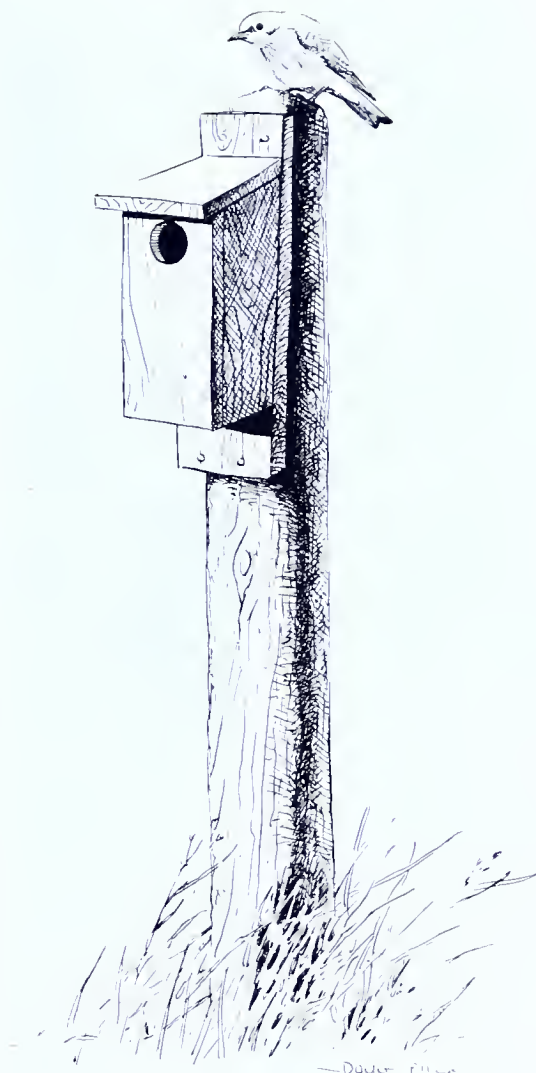
### In the Open

The car jounces over washpan pavement. "It took me a while to learn where to put the boxes. First, you have to locate 'em where the bluebirds like to be—out in the open. Bluebirds don't care for brushy, overgrown fields; they don't like the deep woods. Pastures, lawns, cemeteries, orchards, golf courses. That's what you want, places where the birds can hunt. Put the boxes on the north side of the poles, away from the sun. I usually space 'em about 300 yards apart. Best to turn them toward a bush or a little tree, so the young can have a place to land when they fly out the first time. And face the boxes away from houses and roads. Bluebirds don't like commotion."

The truck turns into Chilcoate Hollow. "Wonderful bluebird country. I've got boxes here, in Shavers Creek Valley and Big Valley. Hartslog Valley. Tar Barrel Hallow. Down to Orbisonia and back in two valleys, Hares and Smith. A couple other routes, too. Hundred and sixty-three miles to cover it all."

Bluebirds sit on telephone lines, fences, wires bracing a tall antenna. They swoop, land, pick up insects, return to their perches. The birds lift their pleasant songs. Their blue plumage is startling against the leaves and the grass.

"A lot of animals use the boxes besides bluebirds. Swallows, titmice, fly-



ing squirrels, red squirrels; deer mice in the winter."

A box gives off the stench of decay. Inside are five young, feathered but dead. Mr. Lane pries the box off the pole, puts it in the back of his truck, and nails an empty box in its place.

"If one adult is killed, the other will usually raise the brood. I don't know what happened here. No claw marks on the outside, which there'd be if a cat or a coon had climbed up. Prob'ly the birds got hit by a car." Mr. Lane pencils a note on a roll of green-and-white paper in the front seat. "Sometimes blacksnakes get in. I only ever caught one snake in a box, but people have told me about seein' snakes crawl in-



**Dutch Country Bluebirds**, the 1984 limited edition fine art print by Ned Smith, offered through the Commission's Working Together for Wildlife program, is sold out. **Big Woods Bobcat**, the 1985 WTFW print is also sold out. Only **River Otters**, the 1983 print shown above, is still available, but it's expected to sell out soon. Orders for this 15 x 22½ inch signed and numbered fine art print, featuring the subject of one of the projects being supported by WTFW, are being filled on a first-come first-served basis while the supply lasts. Order from Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. \$125 each, delivered; framed an additional \$97.50.

side and eat the baby birds, and then being so full they couldn't get out the hole again."

At the next box, Mr. Lane listens for a moment, then claps his hand over the entry. He removes the lid and rummages in a stuffing of grass, feathers, and fur. He draws out an English sparrow, wings securely pinned. The sparrow has dusty brown feathers, a black bib, and bright black eyes that give it a belligerent appearance.

"At least half the time whenever I've checked this box it's had a sparrow. They come from that barn over there. This is the male. You get the male, the female won't come back and the bluebirds will have a chance to use the box.

"Johnny Bull." That's what we called 'em when we were kids, because they were imported from England. They puff around like a pigeon, y'know, assertin' their masculinity." Mr. Lane disposes of the sparrow. He scoops out gobs of nesting material, dusts his hands against his trousers, secures the lid.

### Through Bright Pastures

The pickup climbs through bright green pastures. "English sparrows are pretty bad. And don't tell me about 'cute little Jenny wren.' I'll tell you, wrens aren't all they're cracked up to be. I just might have more trouble with wrens than with any other birds. They drive the bluebirds out, throw the eggs out, throw the baby birds out, and if they can't throw the babies out they'll build a nest right on top of 'em."

One after another, the boxes make Mr. Lane grin. Soon he is whisking off each lid and standing aside without looking—a magician confident in his tricks. Inside the truck cab, the coil of paper unrolls with each success. *Merle Lightner. Knode. Speck. Smith. Eckley. REA. Ma Bell. Low Road.*

Late in the afternoon, clouds fill the sky. A rainshower comes up, drumming the road, soaking the fields of hay. Mr. Lane stops, pulls on a raincoat, and gets out. He wades through wet grass to a box. He eases the lid off and, tilting his hand above it like a roof, peers in from the side. The interior of the box is dark wood, framing dusty blue: the hen on her nest.

Mr. Lane eases the lid back down.

"Once I opened a box and saw a bluebird sittin' there, just like that one. She didn't move a muscle. I watched for a while. Out from under her, a little one poked his head."



*Woodchuck hunting provides . . .*

# Top Tackle Test

**By Keith C. Schuyler**

**Photos from the Author**

**T**HERE IS little doubt that the common groundhog, or woodchuck, is the favorite target of Pennsylvania bow hunters in the off season. Any who have hunted this tough king of the fencerow must acquire a decided respect for it as a game animal. After all, it is the only animal in the country that has a holiday named for it.

Those who celebrate February 2 as the time when the chuck supposedly provides a clue to weather for the following six weeks, regard it more as a sentimental symbol than either a game animal or a weather prognosticator. In England, the tradition stemmed from similar beliefs associated with the concurrent religious holiday, Candlemas. In this country, emergence from winter by both the bear and the badger have been symbols of the observance.

I confess to a sentimental regard for the primarily subterranean frequenter of lush pastures and carefully attended gardens. But that is not based on its fallacious reputation for determining weather. Rather, it is a down-to-earth respect for the chuck as a tough, single-minded citizen of the Pennsylvania outdoors that is only deterred from manufacturing fat by its determination to outwit hunters like myself.

It is this very toughness that makes the chuck a more than worthy quarry. Riflemen long ago discovered that a high-speed centerfire cartridge is preferable to the old 22-caliber rimfire in effecting the proper demise of woodchucks. Likewise, bow hunters have found that both speed and killing power are best combined to score with any consistency. For, whether or not a game



**HUNTERS** often find more than one chuck per burrow in May, before litter mates leave their mother and head out on their own.

dinner is part of the reason to reduce the abundance of woodchucks, the hunter likes to know that his shot is effective at once rather than to have the target duck down a burrow to leave the issue in doubt.

The very tenacity to life attributed to this animal is reason enough to use the heaviest bow and matched arrows in any foray for them. I have seen one break a wooden arrow that caught crosswise in the door to its burrow, or sadly bend an aluminum arrow, in an attempted escape. A broken arrow means a lost chuck, and a bent one can be an expensive experience or a session with an arrow straightener. Both possibilities encourage the use of tough plastic shafts to prevent such happenings when a chuck is dead but doesn't know it.



Even more to the point, if you will pardon the pun, is the use of a broadhead of maximum killing power. This is more apt to stop a groundhog before it even attempts to go back underground.

A personal experience this past summer illustrates the value of a maximum size broadhead. A fairly large woodchuck had taken up residence in an intricate set of burrows located in an abrupt drop at one end of our rural property. The spot is maintained in a somewhat wild state by a patch of staghorn sumac which I think is lovely in autumn—an opinion not shared by my spouse. Consequently, when said chuck made frequent appearances in the front yard, it was suggested that either the interloper or I would have to go.

Being romantically attached to the old shack after thirty years, I lifted my current deer-hunting compound, replete with broadhead arrows, off the hook. I had some feelings of guilt. Employing only medium stealth, I stomped around the house, using it to conceal my movements. After all, with some 4½ acres of lawn to mow every week, my personal feelings were anything but aggressive toward this creature that was helping me do it, in addition to providing good hiding places for cottontails which don't bother said spouse's plantings too much.

The old chuck, which could hear me brush my hair *inside* the house, was nowhere to be seen. But, orders are orders. I walked by our miniature jungle, and there he was, right at the edge of a hole large enough to accommodate a St. Bernard, standing up. I caressed the now threatened aluminum shaft and shot.

Actually, the shot was right on tar-

get. It seemed to knock the chuck backwards a few inches. But the animal recovered enough to head down the hole. However, the fletching on the shaft was still visible. By the time I could get to it, my old groundhog was lying down in the green pastures wherever good groundhogs go.

Against this background of fact and foolishness, improvements in archery tackle and equipment of recent years should be taken into consideration for hunting *Marmota monax*, the eastern woodchuck. Or you may have heard him called, of course, just plain chuck, or: whistlepig, siffleur (by French-Canadians, meaning whistler), pasture pig, wejack (of Cree and Chippewa Indian origin), and more recently, ground grizzly, of Leigh Nuneviller (president of Pennsylvania Bowhunter Society) origin. Actually, the Anglicized name “woodchuck” came from early Devonshire settlers who thought the animal resembled a “chuck,” their name for little pig.

Our subject is biologically a marmot, even though it is as tough and smart as a pig. It is its toughness, almost as much as its wariness, that makes it a real challenge for bow hunters.

### Too Many Lost

Far too many archers lose woodchucks after a hit, even though it may be speedily fatal. But the animal's habit of feeding or exposing himself near a burrow frequently provides it sufficient time to make it to a hole before it succumbs. If the broadhead is not well placed, arrow damage is not uncommon, or the animal escapes. Despite the desirability of holding down the number of woodchucks, both score and table intentions can suffer if the woodchuck cannot be recovered, for a young animal is fine eating when properly prepared.

The compound and the even faster cam bow provide considerable leeway in the selection of both arrows and broadheads. Note there is no mention of anything less than a broadhead. Despite its much smaller size when com-



pared to deer and bear, a woodchuck requires a comparable head to produce maximum damage. But it takes a fairly heavy bow and arrow to do the job. This is not to say that the recurve and the longbow cannot be effective. Everything is somewhat relative to, first, power, and secondly, speed. In the latter category, the cam comes first, followed by the regular compound, the recurve and the longbow, in that order — at equal bow weights.

This doesn't suggest that you should go out and buy a new bow just to hunt woodchucks. The ability to properly handle what you have is more important than a search for either power or speed. It would be absurd to suggest that anybody use heads heavier than those utilized for deer hunting just for groundhogs. Especially since it is assumed that you have balanced your arrows and broadheads to your bow. Penetration is no problem with most any hunting bow when shooting woodchucks, despite the animal's toughness and tenacity to life.

However, speed is a consideration. An alerted woodchuck is somewhat comparable to a deer, with all its springs wound up for instant flight. Only the former is a much smaller target. Any movement before the arrow arrives is likely to result in a complete miss.

In fact, the average woodchuck is comparable in size to the killing area of a deer's chest. This is an additional reason to hunt for it throughout late spring and summer as excellent practice for deer season. Shooting distances on most woodchuck shots are comparable to those you might expect during the special archery deer season. If you can take the old chuck with any consistency, you should be a winner in October — if you get the opportunity to shoot.

**HUNTIN' chucks with big game tackle is a great summer pastime. Just don't forget that fluorescent orange hat; archers need them, too.**





In flight, if you catch one away from its burrow and it isn't immediately hidden by weeds or brush, a chuck is relatively slow. But its low profile when on all four feet makes it always a difficult shot. If it is sitting right at, or close to, its entryway, an arrow must get there fast to do its duty. Both hearing and sight are keenly developed in this marmot.

Although originally found in and on the fringe of woodlands, from which it received its name, the woodchuck today inhabits almost any ground where good food is available. The exception is lowland which is wet or subject to occasional flooding. High ground seems especially to its liking. Such areas are often rocky and rough on both arrow shafts and heads. You might keep this in mind before discarding broadheads that will no longer sharpen to an edge you consider sufficient for big game.

This is not to suggest that dull heads should be used for woodchucks, but sharpness is not as critical as for big game. Nevertheless, because the smaller animal does not present as much bulk resistance, it takes correspondingly more energy to effect good penetration for a comparable amount of body tissue. For example, many times I have shot grouse and spruce grouse, as well as several ringnecks, with a 50-pound bow, utilizing *field target* heads, without effecting full penetration. And though a field point will kill a woodchuck, many times it won't do it fast enough.

Of course, the slicing effect of a broadhead minimizes problems of penetration. It is still a consideration even though a woodchuck is a very small animal when compared to any species of big game. If the shot is longitudinal, either from the front or back, the penetration requirement is substantially increased. If you don't get good penetration, regardless of the angle, you are unlikely to stop a woodchuck before it can retreat down a hole.

Because today's woodchuck is frequently found in clover fields or similar cultivated cover, there is a special responsibility to recover any arrows. Cost of arrows alone is a factor, but broadheads can be a later source of trouble for the farmer. The same is true of aluminum shafts if they are your choice.

Most farmers welcome woodchuck hunters because, however lofty our individual sentiments might be toward this oversized mole, landowners are usually only too glad to have you thin their numbers, for chuck holes are still a hazard to livestock. Main entryways are usually quite visible, but there is frequently a hidden escape hole somewhere nearby. These are the ones that usually cause injuries to livestock or even the occasional human. During wet weather, it is not unusual for a tractor to become bogged down where a burrow collapses.

### Best Time

When is the best time to take woodchucks? A quiet morning when the sun threatens to make it hot is ideal. But just about any period, early or late in the day, is a good time to try. From May to September, and even later, you can have sport that is challenging and good practice for the big game seasons.

It is not unusual to get a shot at a woodchuck when bow hunting for deer in October. Mark Payne, Nesopeck, set something of a record last winter when he had two shots at a chuck during the primitive hunting season after Christmas. The date was December 28!



# The Varmint Rifle...

## Past And Present

By Don Lewis

Photos by Helen Lewis

**“THIS IS THE** third evening we’ve matched wits with the sawdust chuck, and not a shot has been fired,” Helen lamented as she glassed an abandoned log and sawdust pile some 250 yards away. “I can’t see any signs of life around that old pile of debris.”

“Be patient,” I warned. “When you get a look at the resident of that pile of debris, you’ll not be sorry.”

“If the chuck is as large as you claim, I should be able to see its footprints in the sawdust from here,” she said.

Ten minutes went by with only an occasional breeze skipping across the long pasture field. I got to thinking that maybe the chuck had left or some other hunter had nailed it, but a low whistle from Helen broke my chain of thought and assured me there was action far across the field. A ten-second look through my binoculars showed a big chuck moving along the bottom logs. Cautiously, he moved up one log and then another; he was heading for the top.

When the chuck reached the middle logs and stopped to survey the surroundings, I heard Helen close the bolt on the 6mm Remington 700 heavy barrel.

“That’s a wide open shot with a solid backstop; you’ll not get a more perfect shot.”

The words had barely been uttered when the 6mm spoke with authority; the chuck tumbled to a lower log and lay motionless.

“Nice shooting. Couldn’t have done better myself.”

A short while later, Helen extracted a 14½-pounder from the logpile. It wasn’t the biggest chuck we had en-



**RUSS WHITTAKER**, Cowansville, on a Craver MICR Folding Shooting Rest, touches off the set trigger on his Thompson/Center 22-250, topped with a 3-9x Weaver.

countered over the years, but it sure made the trophy class.

The world of the varmint hunter has seen a multitude of improvements over the past thirty-five years. The entire picture has changed from the days of the humble 22 rimfire long rifle hollow point that was king for decades to the super accurate, long range factory and wildcat outfits of the 1980s. Varmint hunting is no longer a bottom-rung-of-the-ladder sport; it qualifies in every sense as a highly specialized shooting activity.

Today, the varmint hunter can have most anything he needs from the speedy little 17 caliber with its explosive 25-grain bullet to the Remington 25-06



**LEWIS nailed his first chuck in 1934 with a \$4.95 Model 60 Winchester 22 single-shot. Over the ensuing 50 years he's accumulated a few more varmint outfits and seen his hobby grow into a highly sophisticated sport.**

that whips a 75-grain bullet out of the muzzle at close to 3700 fps. For the last twenty years or so, factory cartridges have held the spotlight, but the varmint outfit was essentially the product of the wildcatter. There are positive signs the pendulum may swing back to the custom gun builder. Still unknown to the vast array of varmint shooters are wildcat cartridges in one stage or another of development. There could be some interesting surprises in the near future.

### Have To Get Involved

This column is not specifically on varmint rifle history, but I have to get somewhat involved to show why we have such excellent cartridges. To set the scene, we have to step back into the 1920s when custom gun builders took a second look at varmint hunting. Even then, it was evident that something more than the 22 rimfire was needed.

In the late 1920s Hervey Lovell developed the 22/3000 Lovell by necking down the 25/20 single shot to accept a .224 slug. With a maximum load of 4227, it was claimed the new creation

pushed a 50-grain slug out the muzzle at close to the 3000 fps mark. This was a considerable velocity gain over the 22 Hornet created by Captain Grosvenor Wotkyns and Colonel Townsend Whelen from the Winchester 22 WCF. The original Hornet cartridge had a top muzzle velocity of just under 2500 fps with a 45-grain bullet. It's easy to see why the 22/3000 Lovell brightened the hearts of the early varmint clan.

The 22 Lovell was beefed up in the mid-'30s by Harvey Donaldson, father of the famous 219 Donaldson Wasp, and called the 22/3000 2R, or just plain 2R Lovell. The 2R designation derives from the fact that the desired case form was achieved with the second chambering reamer ground by gunsmith M.S. Risley, who did such work for Donaldson. I might add that Donaldson, who was famous for wildcatting various case by expanding the case to accept more powder, did nothing more than sharpen the shoulder angle from about 5½ to 12 degrees. When a conventional 22/3000 Lovell was fired in a Donaldson's chamber, the shoulder angle was pushed forward, allowing more powder



capacity in subsequent loads. The results were not only a slight gain in velocity but also better combustion of certain powders.

During this period, gun factories took a negative look at varmint hunting. Since communications between the varmint hunter and the arms factories were almost nonexistent, plus the fact that varmint-hunting buffs were a distinct minority in the hunting realm, there wasn't enough sales potential to create a genuine interest at the factory level. However, in all fairness to the arms factories, the gun cranks who were involved in the wilddcatting scramble were avid varmint hunters themselves. Each fellow was out to design a better varmint cartridge.

To prove my point a little farther about the lack of interest with the gun factories, Winchester offered 22 Hornet ammo in late 1930 before any factory rifles were available. Actually, Savage produced the first factory rifle, their M23D in 1932, followed by Winchester, who offered the Hornet in their Model 54 in 1933. Here was an unusual situation where a factory cranked out a cartridge but didn't offer a rifle chambered for it.

It's pure speculation to say that perhaps Winchester felt the Hornet cartridge wouldn't generate much interest—hence there was no need to get uptight about chambering for it. Whether it's speculation or not, facts are facts, and there probably were some embarrassed factory officials when the tiny cartridge was widely accepted by the varmint clan. For more than fifteen years it reigned supreme, and proved beyond a doubt that varmint hunting interested more than just a few eccentric guncranks. Its only

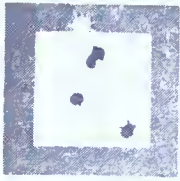


**WILDCAT** varmint cartridges are still being developed. The 22 Cheetah, left, designed by Jim Carmichael, was discussed in a previous column. The 250 OLE, designed by Harold Olson, Shinglehouse, with a 75-grain bullet, runs in the 3700 fps bracket.

serious competitor was the 218 Bee, which was brought out in 1938. The Bee was a better looking cartridge and had a bit more velocity, but it never became as popular as the Hornet. The reign of the Hornet and Bee came to an abrupt end when Remington introduced their famous 222 in 1950.

Many of today's varmint clan feel the 222 Remington cartridge started thousands of varmint hunters and just plain shooters in the quest for accuracy. The 222 certainly deserves a lot of credit for making varmint hunting a recognized sport, but home reloading and group shooting are the major contributors in making the average shooter accuracy conscious. I'm not overlooking the fact that the inherent accuracy of the 222 Remington, along with its ease of reloading, made it the perfect cartridge to work with. I feel it's safe to say that during its early life, the average 222 owner who reloaded his own fodder fired 20 shots downrange for every shot fired in the field. The elusive one-inch 10-shot group kept thousands of varmint hunters almost bolted to a benchrest seat.





**ACCURACY** has improved tremendously over the years. The two groups on the left are close to an inch, considered excellent in the '40s. Today's shooters, however, enjoy extreme accuracy like the two 5-shot groups on the right. Left is a comparison between the 22 Cheetah, right, and the 22-250. Note the sharper shoulder angle on the Cheetah.

At the moment, the 17 Remington, 222, 22-250, 243, 6mm and the 25-06 handle all the needs of the modern varmint hunter, but in the early days of experimentation forerunners of today's cartridges carried names such as the 170 Woodsman, 220 Rocket, 234 Sisk Express, 22-1906 Express, 244 Ackley Improved, and the Sedgley 22-4000, to name a few. There was little or no intention of mass producing most of these wildcats. I may be wrong, but of the cartridges just named, I think only the Sedgley 22-4000 was offered in commercial ammunition. However, it was so much like the Swift, and was handicapped by having a smaller bore (.2225 for the Sedgley, .224 for the Swift), that nothing was gained by having one built.

With a blistering speed of over 4100 fps with a 48-grain bullet, the 220 Swift was the highest velocity factory cartridge in production for years. But where did the 220 Swift come from?

Most reloading manuals simply state that Winchester introduced the 220 in 1935, but that's not the whole story. Actually, the work of G. L. Wotkyns with a necked-down 250-3000 Savage case is pretty much responsible for the creation of the 220 Swift cartridge, though when introduced by Winchester the 6mm Lee Navy case was the basis for the Swift. Upon completion of their experiments, Winchester Repeating Arms Company brought it out in their Model 54 bolt action.

The whole idea behind the Swift was speed. High velocities intrigued most gun builders, including the big arms producers. To obtain velocities above the 4000 fps mark, Winchester stuck with 46- and 48-grain bullets. From a long range shooting viewpoint, a heavier bullet would have been a wiser choice. Going with a 53- or 55-grain bullet and dropping the velocity to the 3700 fps level would have made the Swift nearly unbeatable. Come to think of it, that's the range the popular 22-250 works in.

As mentioned, Wotkyns used the Savage 250-3000 case necked down to accept the .224 bullet, resulting in a 22-250 wildcat. Without taking anything away from Wotkyns, the 22-250 Remington standardized in 1967 came from Jerry Gebby's version which car-



ried a 28-degree shoulder angle instead of the 26½-degree of the 250-3000 case. Gebby copyrighted the name "Varminter" for his case, and he couldn't have chosen a better name; it is without a doubt the best medium to long range varmint round ever produced. During the thirty years it spent as a wildcat cartridge, the 22-250 probably won more benchrest matches than even the famous 219 Donaldson Wasp.

The 6mm caliber with its heavier bullets and long range accuracy potential is popular with countless varmint hunters. I'm not positive when experimenting began with 6mm caliber (.243) bullets, but the first American 6mm production cartridge was the Lee Navy developed for the M1895 straight pull Navy bolt action rifle. Winchester came out with a sporting model 6mm Lee in 1898 but discontinued it in 1903. It wasn't that the 6mm Lee didn't have potential; its failure was due more to the lack of suitable powders. Back then, smokeless-type powders hadn't been on the scene long, and the ones available didn't generate the velocity potential of the 6mm Lee.

Fred Huntington of the RCBS Tool & Die Company may have started things rolling in the 6mm line with his popular 243 Rockchucker. Somewhere in this same time period, the late Warren Page came up with his own 6mm version called the 240 Page Super Pooper. Page went through several creations using experimental ordnance cases of the T-65 type which later became the 7.62 NATO, or the 308, to use the 243 bullet.

From what I can gather, the Winchester 243 is a direct offspring from Page's creation, differing only in the shoulder angle and neck length. Page advocated a steep 30-degree shoulder slope and a long neck, but the factory round has a short neck and maintains the gentle 20-degree slope of the parent 308 case.

At the same time Winchester introduced the 243, Remington came out with the 244. The 244 ran into trouble immediately when it was discovered its

twist of 1 turn in 12 inches was too slow to stabilize bullet weights above 90 grains. The concepts of the two manufacturers with the 24 caliber were different—Winchester thought of the 243 as a game-varmint cartridge and Remington looked at the 244 as a varmint-game creation. The varmint hunter certainly wasn't in jeopardy with the 244, since the slower twist was adequate for 60/90-grain slugs. But the battle was lost, and eventually Remington quickened the twist to 1 turn in 10 inches and renamed the case the 6mm Remington.

## 22 CHeetah

A column or so back, I mentioned the 22 CHeetah, a wildcat which may generate a large following, especially if it gets into factory production. To show that wildcatting is far from dead, I just received a fired case and data on a 25-caliber wildcat put together by Harold Olson of Shinglehouse. In a future column, I'll get more involved with Olson's wildcat. For now I'll say that by using the Remington BR case (roughly a 308 case with a small primer pocket), Olson averaged 3709 fps. Five shot groups at 100-yards are in the dime size or smaller category. The new creation has been dubbed the "250 OLE."

What's the best varmint cartridge? That's about as impossible to answer as who is the most beautiful woman. Now that gun manufacturers have taken a serious approach to varmint hunting, and are using modern techniques and computerized machinery, the world of the varmint hunter will shine brighter each year.

From my own point of view, I doubt if anything practical will be gained in the accuracy column in the foreseeable future. Many of today's varmint outfits will cut ⅝-inch or less 3-shot groups at 100 yards. What more is needed? Bullet drop and wind drift cause more problems than accuracy. However, this will not stop the true wildcatter from trying; it was his persistence that gave the modern heavy barrel varmint rifle its high degree of precision.

# *In the wind*

bob mitchell



A U.S. Circuit Court of Appeals, according to the Wildlife Management Institute, ruled recently that Indians may kill endangered species on reservation lands. The case came about after a federal court convicted several Indians for killing and selling more than 200 bald eagles. Four of the Indians appealed the decision. The case went to the Appeals Court, which ruled Indians have treaty rights to hunt on reservations as they please. The court did rule, however, that Indians do not have the right to sell any parts of the animals, letting stand the lower court's convictions for selling the eagle artifacts.

A nesting colony of white pelicans was recently discovered in Wyoming, only the second known colony in the state. The 245 active nests constitute a relatively small colony, but researchers are optimistic because it apparently is a new one. As there are less than 20 such colonies in the United States, the U.S. Fish and Wildlife Service has classified the white pelican as a "sensitive" species; a significant reduction in population would change its status to "threatened." The loss of nesting and feeding sites, pesticides, and human disturbance have all contributed to the decline of white pelicans.

**Fifteen moose from Ontario were released in Michigan's Upper Peninsula last January, the first of several releases designed to restore a huntable moose population there. The animals were captured in Ontario's Algonquin Park where biologists riding in helicopters herded moose into deep snow and then tranquilized selected healthy adults—11 pregnant cows and 4 bulls.**

According to a comparison of three separate studies of posting and landowners' attitudes, reported in the Wildlife Society Bulletin, the amount of private land posted in upstate New York increased from 26 percent in 1963 to 42 percent in 1972, to 50 percent in 1980. Landowners, however, most often post their properties to control access, not prohibit it. According to the 1980 survey, 65 percent of the landowners who posted indicated they allowed hunting to those who asked permission.

**A three-year-old male bald eagle, produced by a captive pair at a zoo in Columbus, Ohio, and hacked into the wild at Tennessee's Land-Between-the-Lakes in 1981, returned to the Tennessee site with a mate in April '84. They successfully produced and fledged one young. This is only the second time in more than 20 years that bald eagles have nested successfully in the Volunteer State. It is even more significant because bald eagles don't normally reach sexual maturity until four or five years of age.**

Specific criteria for determining areas where the use of lead shot should be prohibited have been proposed by the U.S. Fish and Wildlife Service. According to the guidelines, the areas where non-toxic shot regulations should be considered include those where there is a harvest of 10 or more ducks or geese per square mile, or where three or more waterfowl are known to have died from lead poisoning. Under the proposal, areas meeting these criteria would be intensively studied to determine more precisely the incidence of waterfowl lead poisoning.

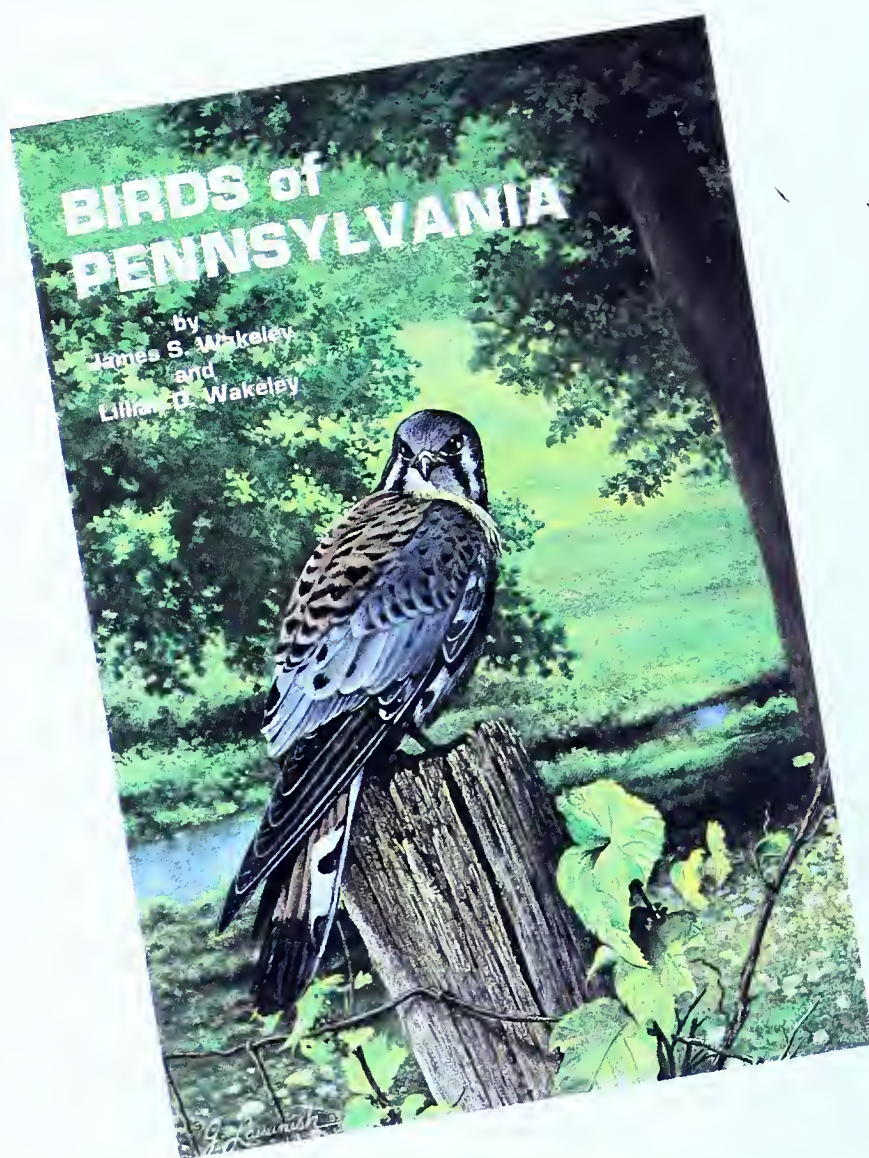
President Reagan recently authorized the establishment of a Presidential Commission on Outdoor Recreation Resources. According to the Wildlife Management Institute, the commission will review current outdoor recreation policies, programs and opportunities, and then make recommendations on how outdoor recreational opportunities can be ensured for future Americans. A similar group created in 1958 led to wilderness, wild and scenic river systems, and federal/state cooperative programs. All have enhanced the recreational opportunities available today.





## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. If you are not sure of which maps you want, write for a PGC map order form.



*Birds of Pennsylvania: Natural History and Conservation*, a completely new book by Jim and Lillian Wakeley, includes the most up-to-date information on bird biology and behavior, and the kinds of birds commonly found in the state, arranged according to the type of habitat where they are most likely to be seen. This 214-page hardcover book, supplemented with 40 full-color pages featuring the Game Commission's popular bird charts and previous GAME NEWS covers, is being sold for \$10, delivered.

Make check or money order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**  
P.O. Box 1567  
Harrisburg, PA 17105-1567



PENNSYLVANIA  
**GAME NEWS**

JUNE, 1985

60 CENTS



nRoever  
1985





This 216-page soft-cover book contains all of Ned Smith's "Gone for the Day" columns which appeared in GAME NEWS over a four-year period, including approximately 40 full-page wildlife illustrations and over 100 pen and ink sketches. Price, \$4 delivered.

Make Check or Money Order  
Payable to

**PENNSYLVANIA  
GAME COMMISSION**

P.O. Box 1567  
Harrisburg, Pa. 17120



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

- Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doeblar, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

- Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starner**  
Comptroller

**BUREAU DIRECTORS**

- Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

- Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**GAME COMMISSION**  
(717) 787-4250

**FEATURES**

- Flash Floods!** ..... 3  
By Francis X. Sculley  
**Hunting With Friends** ..... 6  
By John D. Taylor  
**The Ringneck Situation** .....11  
By Dick Donahoe, PGC Land Manager  
**Selecting Sets** .....15  
By Joe Kosack  
**When It Comes to Long-Range Chucks** ..19  
By Nick Sisley  
**The Great Rugged Valley Brush, Bramble  
and Timber Charge** .....24  
By Edward Karasek  
**My Take-Along Fix-It Kit** .....30  
By Fred Bouwman

**NEWS**

- Field Notes** .....34  
**Conservation News** .....39  
By Ted Godshall  
**Books in Brief** .....46  
**In the Wind** .....64  
By Bob Mitchell

**COLUMNS**

- GAMEcooking Tips** ..... 5  
By Carol Vance Wary  
**Young Artists Page** .....31  
**Outdoor Wildlife Learning** .....42  
By Bill Einsig  
**Another View** .....44  
By Linda Steiner  
**DGP Diary** .....47  
By Joe Carlos  
**Thornapples** .....50  
By Chuck Fergus  
**Keep It Straight (Archery)** .....55  
By Keith C. Schuyler  
**Harder Than Lead (Guns)** .....59  
By Don Lewis

**COVER PAINTING BY J.M. ROEVER**  
(Cover Story page 5)

# Waterfowl Stamp Contest Announced

THE DESIGN FOR Pennsylvania's 1986 waterfowl management stamp will be selected through a contest open to all serious wildlife artists.

Pennsylvania's Waterfowl Management Stamp and Print Program, now in its third year, has benefitted greatly from the talents of Ned Smith and James Killen, who were commissioned to do the first three stamps. Ned's *Sycamore Creek Woodies* was prepared as the first-of-state stamp in 1983, and his beautiful mallards are the subject of the 1985 stamp. Killen's three Canada geese highlighted the stamp in 1984. The paintings of these nationally renowned artists were the key for establishing a solid beginning for Pennsylvania's program.

Revenues from the sale of Pennsylvania's "duck" stamps, and royalties from the sale of prints derived from these paintings, have been used to purchase nearly 700 acres of prime wetlands in McKean and Mercer counties. Additional monies, supplemented with Ducks Unlimited funding, were used to purchase an aquatic weed and channel cutter for wetlands habitat improvement. Other monies have been used to expand the Commission's waterfowl-education program at the Pymatuning Waterfowl Museum in Crawford County. All are worthwhile projects, and additional wetlands are under consideration for purchase with remaining duck stamp revenues.

Now, other wildlife artists are being given the opportunity to have their work chosen for a Pennsylvania waterfowl stamp. The first competition will be held at Linesville, during the annual Pymatuning Waterfowl Expo scheduled for September 21-22, 1985. This exposition, now in its fourth year, is sponsored by Ducks Unlimited and brings to Crawford County thousands of persons interested in waterfowl, waterfowl hunting, and wildlife art. Interested artists can obtain a copy of the contest rules and regulations by writing to: Duck Stamp Contest, Pennsylvania Game Commission, Bureau of Information and Education, P.O. Box 1567, Harrisburg, Pa. 17105-1567.

Collectors are reminded that the 1983 first-of-state waterfowl management stamp is available for sale through December 31, 1985. Immediately following that date, all remaining unsold stamps will be destroyed. Prices for these — as for each year's issue — are: individual stamp, \$5.50; numbered plate blocks of four stamps, \$22; and numbered full sheets of ten stamps, \$55. The full sheet price drops to \$40 when five or more sheets are purchased.

Waterfowl management stamps can be obtained by sending a check or money order payable to the Pennsylvania Game Commission, Department AR, P.O. Box 1567, Harrisburg, Pa. 17105-1567. — *Carl Graybill*





KJPraether

**RAGING WATERS SWEEP DOWN hillsides, carrying everything before them—homes, campers, fishermen, berry pickers. . . .**

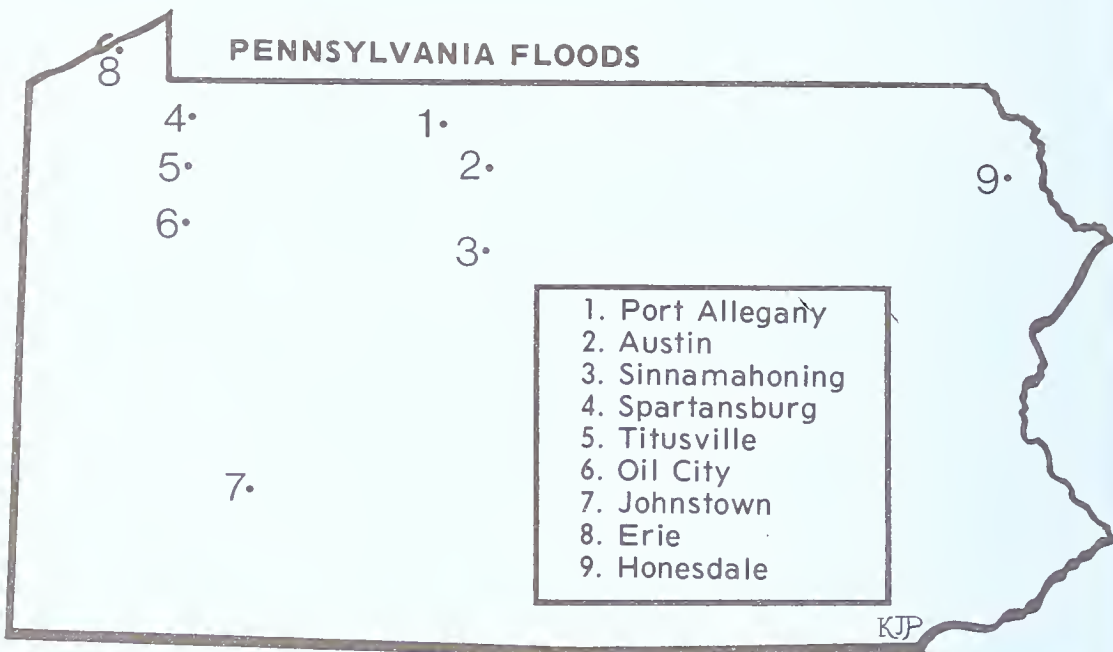
# **FLASH FLOODS!**

**By Francis X. Sculley**

**W**HAT IS America's most dangerous weather-related disaster? Contrary to all belief, it is not the tornado, the world's smallest and most vicious storm. The devastation of a tornado can be almost beyond belief—limbs torn from trees, planks driven through concrete bridges, silos up-ended and carried for miles, tombstones shattered, straws driven into tombstones, bridges wrested from their moorings and swept downstream. A hundred things associated with a tornado cannot occur with just high winds. In spite of all of this overwhelming evidence, the weather department—and who should know better?—claims that the cloudburst or the flash flood which it occasions is the na-

tion's most dangerous weather-related disaster. Raging waters which sweep down hillsides carry everything before them—homes, trailers, campers, hunters, fishermen, berry pickers—adding all to the flood of debris which sweeps down the valley. Oftentimes a flood of this type lasts but half an hour or forty-five minutes, but the devastation is amazing.

Of the afternoon of June 2, 1902, a cloudburst released a wall of water on the village of Heppner, Oregon, which killed 274 people in less than an hour. At three o'clock in the afternoon the sun was shining brightly and the heat was so oppressive that people were lying on their front lawns or sitting beneath an awning in the village square, yet by the



**MOST OF PENNSYLVANIA'S flash floods have occurred in the northwestern part of the state, as indicated here.**

supper hour several hundred persons had been swept to their deaths.

But this happened in Oregon, thousands of miles from here. Everyone knows the narrow sheer-walled canyons of the Rocky Mountains can be death traps during severe mountain storms. Let's talk about Pennsylvania.

Believe it or not, Pennsylvania has suffered more from the effects of flash floods caused by cloudbursts than any other state in the union. In several occurrences, anywhere from 50 to 200 people have been swept to their death.

### One Summer Night

On a summer night in 1943, for instance, over 32 inches of rain fell on the upper Allegheny River drainage near the village of Port Allegany. At nine o'clock the following morning, an almost vertical wall of water, said to have been 20 to 25 feet high, swept down on the village, carrying many homes down the valley or into the raging Allegheny. A brand new concrete and steel bridge which had been dedicated only the day before was wrested from its moorings and swept downstream, creating other problems. Eight people lost their lives in the beautiful little town, six dying in the village

square. Unthinkable? Possibly, but not necessarily.

In another little village, Austin, a mere 14 miles away, the Bayless Dam, an earthen structure, was split asunder late in the afternoon and a wall of dirty brown water rushed down on Austin, carrying 42 homes away. This same dam had previously given way in September 1911, carrying 79 persons to their deaths. This time there were no casualties, but Austin was devastated and to this day has not completely recovered from the 1943 disaster. Here are two occasions of cloudbursts that did not happen in the Far West, and they were probably as severe as anything ever known in the Rockies.

Great as the destruction was at Port Allegany, it could not begin to compare with what happened to Oil City and Titusville in the summer of 1892. On that day a savage cloudburst struck above Spartansburg and a tiny earthen dam gave way late in the evening hours. A muddy wall of brown water descended on Titusville. Within an hour the prosperous oil village was matchwood. Oil tanks snatched from their moorings were set ablaze by sparks from furnaces. In the midst of a devastating flood, the city was a sea of flame. Sixty-



two people died in neck-deep water, most of them burned to death. Many of those who escaped the flames were swept away in the current.

A short time later, the same thing happened in Oil City. One tank after another ruptured, spilling countless gallons of oil and benzene onto the floodwaters. This was ignited by sparks. A tremendous explosion destroyed derricks, tanks—everything within range. Before the day was over, Oil City and Titusville were devastated and 143 of their citizens were dead. Other than the Johnstown flood of 1889, nothing in the history of Pennsylvania has matched the twin disasters of Oil City and Titusville, all occasioned by a cloudburst and the rupturing of one very small dam.

Fifty miles to the northwest and 21 years later, on August 15, 1915, a cloudburst inflated tiny Mill Creek to ten times its normal size. Snatching up willow trees and hay stacks, the raging flood waters hit one dam after another, each of which gave way, carrying a muddy wall of water through the center of Erie, Pennsylvania's third largest city. Before darkness fell on that day, 77 residents died, including five little children who had been fishing for crayfish on the edge of one of Mill Creek's tiny tributaries. All were swept to watery deaths somewhere in Lake Erie. Their remains were never found.

The Erie flood ranks as one of Pennsylvania's greatest disasters, though perhaps it is less known than many others because of less loss of life.

During the 1930s a cloudburst near Honesdale in the Poconos brought a wall of water rushing through a grove of trees. A hotel was torn from its foun-

## **GAMEcooking Tips . . .**

### **Creative Barbecue Sauce**

Ketchup makes a versatile base for any number of barbecue sauces. Add a can of peaches—or pears or apricots—undrained, or a can of cranberry sauce, to a bottle of ketchup and blend in a blender. Pour over wild fowl and bake slowly until tender. The seasonings in the ketchup and the sweetness of the fruit make these variations the perfect blend of flavors necessary for an exceptional sauce. Experiment. Try applesauce or sweet jellies and jams. Be creative!

### **Barbecued Rabbit**

- 1 rabbit (2–2½ lbs.) or 2 small rabbits
- 1 cup flour
- 1 tsp. salt
- ½ cup oil
- 1 16-oz. can whole cranberry sauce
- 1 bottle ketchup

Clean rabbit and cut into serving pieces. Dredge in seasoned flour and brown in hot oil. Drain. Combine cranberry sauce and ketchup in saucepan over medium-low heat. Stir to blend. Pour sauce over rabbit and bake at 350°.

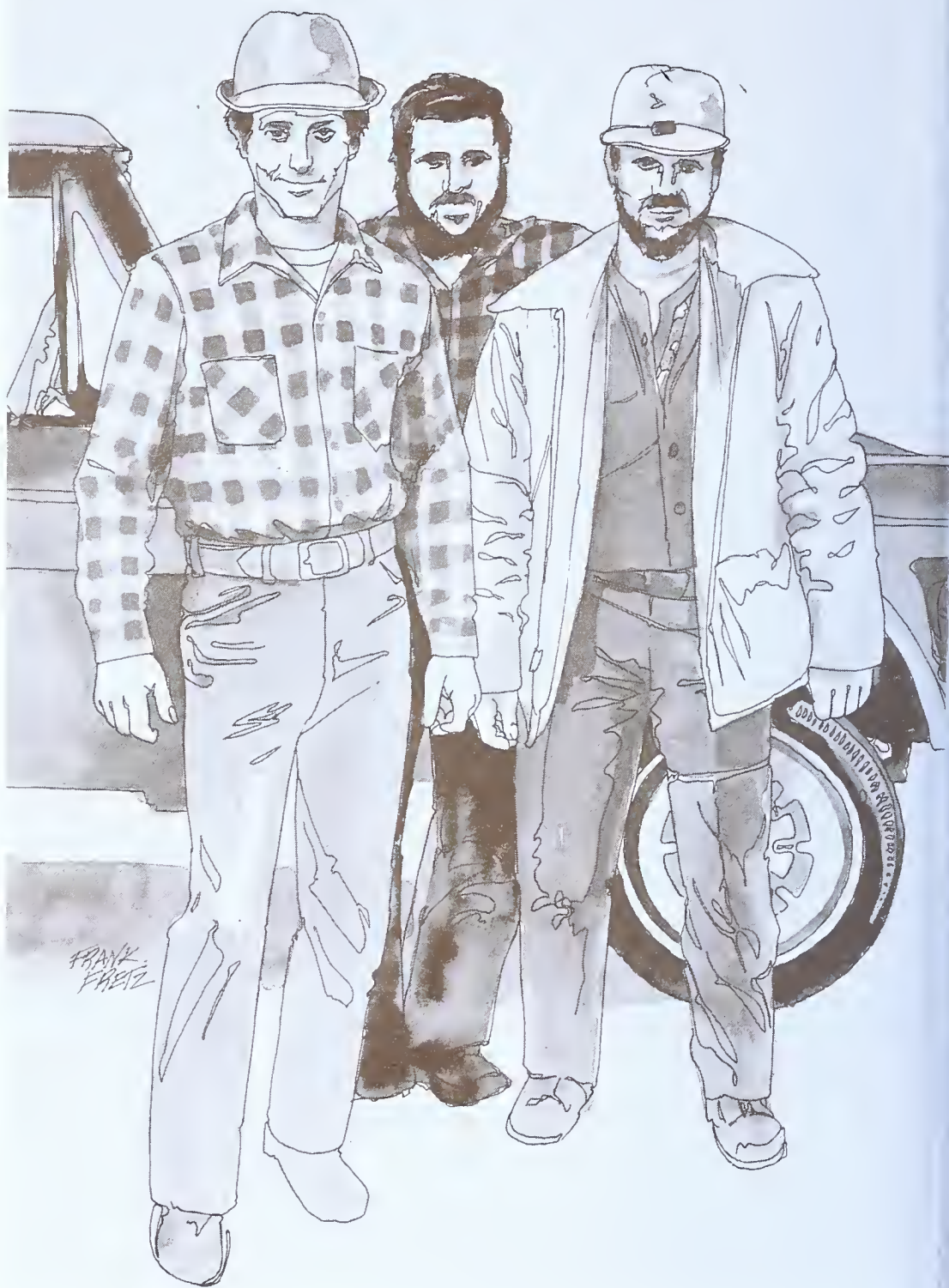
**—from Wild Game Cookery  
by Carol Vance Wary**

dation and swept through the woods like a giant houseboat. The revelers in the barroom had little chance to escape. Thirty-eight died.

These examples make it obvious that flash floods can be killers. Warnings that one can be expected should be taken seriously.

## **COVER STORY**

A subdued woodie guarding her precious brood portrays perhaps more than any other scene the accomplishments of modern wildlife management practices. After becoming nearly extinct at the turn of the century, when their habitat was being destroyed and market hunters pursued them relentlessly, wood ducks are now the most common breeding duck in the eastern United States, thanks to the enactment of sound conservation practices.





*Here's the inside dope on . . .*

# HUNTING WITH FRIENDS

By John D. Taylor

**F**INDING hunting partners when you work unconventional hours is a difficult thing to do. I work the graveyard shift and sometimes wonder if I'm not turning into a mushroom. Most of my friends work day work. Getting together sometimes seems impossible.

Three friends, however, can usually accompany my forays afield. Each has certain characteristics that make them, well . . . unique is a kind word. Let's be honest. More often than not, I'd sooner hunt without them.

My friends are self-acknowledged experts in all phases of the field sports. Each has his own speciality and I'll admit they're usually right in their own fields. However, hunting with them ranks right up there with a trip to the dentist. They just haven't learned to appreciate my mere-mortal, head-on collisions with fate.

Lucky Donthave is my pheasant hunting companion. To use the common phrase "my pheasant hunting buddy" would have been an outright lie, so I won't. Simply put, the guy is so lucky I hate him. A pheasant could flush four counties away, beyond miles of wonderful cover, and he'd still fly straight into Lucky's skeet-choked, 16-gauge, Pigeon-grade L.C. Smith. How Lucky got a Pigeon-grade, skeet-choked, 16-gauge Smith is beyond me. A 16-gauge skeet?

Taking a gun like that afield, even shooting the thing now and then, makes him a candidate for the booby hatch. Any normal fellow would destroy the stock finish and dent both barrels on his first hunt. Not Lucky. It looks good as the day he bought it.

Back to pheasant hunting. Lucky likes to consider himself a dog trainer. I dabble in the black art with Jack, my German shorthair, but I'll never come remotely close to mastering it.

Lucky has a schnauzer-clumber spaniel-weimaraner-peekapoo who points, fetches ducks like a lab, and looks like an industrial-size floor mop. But golly, can Alfonzo hunt! (I have to take Lucky's word that Alfonso is pointing a bird. I can't tell one end from the other, let alone if he's locked up or not.)

On our last pheasant hunt, Lucky had a good time. He shot two roosters within twenty minutes and spent the rest of the day making Jack honor Alfonso's points. Every bird we flushed went directly toward him but stayed at least 75 yards away from me. I didn't bother shooting. Whenever I do, Lucky has to critique my style.

## Snatch Alfonzo

Jack tried to snatch Alfonso and shake him like he does the mops at home. Lucky blew a single whistle blast, froze Jack in his tracks with a "whoa" (something I'd spent months trying to achieve), and promptly gave my well-intentioned shorthair a lecture on the value of a well-disciplined gun dog. That's the thing I dislike most about Lucky—everything always goes his way.

If he had been along with Jack and me on our last pheasant hunt, he'd have ruined it.

The sky was threatening rain all day long, but we hunted anyhow, even though we couldn't find any birds.

About two that afternoon it opened up.

There was something special about being out in the rain and not having seen a single bird all day. It put real perspective on what pheasant hunting is all about. Lucky just doesn't understand my having fought the good fight but lost (emphasis on that word) attitude. Everything has gone perfectly for him all his life. How could he appreciate having tried hard but failing, that it's how you play the game, not who won, that really counts.

When November screeches to a halt after Thanksgiving, buck season tags along. Deer hunting isn't my favorite pastime but it is a good way to fill the time before winter grouse season. If I ever get lucky again and actually shoot a buck early on, there might even be time to slip in a little late-season waterfowling.

Ulfrich (Ulfie for short) Knowbetter is the consummate whitetail hunter and my guide during deer season whether I choose to have one or not.

Unlike Lucky, Ulfie doesn't connect every season, but he does know everything there is to know about white-tails. When one twitches his ear, Ulfie can tell you whether he is listening to a squirrel scamper down an oak a half-mile away, or your heavy breathing. Ulfie even put in some time as an elk guide out West. He quit because it didn't allow him enough hunting time.

### Major Flaw

Ulfie has one major flaw. He likes to prattle on and on about deer hunting when we're deer hunting. I don't know about you, but I like to discuss topics other than deer at deer camp.

When we hunt together, Ulfie is constantly telling me what I'm doing wrong. "Don't step on that twig, white-tails have an incredible sense of hearing. . . . You're moving too fast. . . . You're moving too slow. . . . You should be higher on the mountain. . . . You should be lower today. . . . Did you see that track? It was made by a fork-

horn trotting at half speed with a pulled neck muscle."

He drives me crazy!

One unusually mild day this past season, I may have solved my problem with Ulfie.

I'd been on stand since five that morning. It was one-thirty now, and I hadn't seen a single tail flicker. Utterly bored, I decided to check out some grouse coverts I'd noticed along the logging road coming in. I knew I could slip away from Ulfie, so long as no deer were around to key him in on my behavior, so I quietly and with as much speed as I dared hoofed it back to the coverts. I was gone a grand total of one hour.

I honestly thought I'd gotten away with it. Ulfie's orange coat and cap were plainly visible from the road and I was sure Ulfie wouldn't leave his stand. (His wife had a baby, "Buck," during deer season two years ago. Ulfie couldn't be reached until after Christmas muzzle-loader season, when he came in to restock the food supply in his camper. Even then he stayed with Mrs. Knowbetter only an hour. The head nurse threw him out—not that he minded—because he was wearing too much "Skunk Screen.") Just as I was about to settle onto the comfortable log seat at my stand, I heard what sounded like a deer snort coming from behind me. Could it be, I wondered. A second snort rang out and I turned around to see what caused the commotion.

There was Ulfie, down on all fours, pawing the leaves away, so he could chew acorns. A doe beside him was the source of the snorting. When my nylon coat scraped the tree, their ears perked. Then Ulfie and his doe-friend took off, bounding through the woods. He almost kept up with her, too.

I gathered his hunting gear together, took it back to camp, and sent it parcel post to his wife and kid, figuring they could sell the stuff and buy some groceries. Venison and deer bologna get to anyone after awhile—except old Ulfie.

I called later that year to see how



they were coming along and to satisfy my curiosity, wondering if Ulfie had ever come home. I was stunned. Ulfie's wife said, "Oh, Junior is fine. His spots are gone and he's got some velvet to rub off his buttons yet. But he's fine. Ulfie is fine, too. He's out back, feeding on the farmer's corn. Almost got shot last week, though. Crop depredation, you know. I worry about him crossing the highway. Say, you're coming with him next season aren't you?"

No, ma'am! Crazy deer hunters!

B. Etter Judgement, "Judge" for short, introduced me to the fine sport of turkey hunting. As a result of his tutelage, I almost brought a wily tom home. Had I played my cards better, I'd probably have got him. That's the price I pay for being a maverick—I have no sense, that peculiar knack of timing and knowledge that keeps guys like the Judge out of trouble and into good situations.

Last spring the Judge and I arranged to go up north to an exclusive hunting lodge. The Judge has an in with the owner and he lets us stay for free. We arrived the Friday before gobbler season opened. What a sweet spring day it was. The sky was bright blue, the sun was warm but not hot, and all the world seemed preoccupied with growing and living again. After we stowed our gear, the Judge suggested we do some scouting and see if we could locate

some of the gobblers the lodge owner told him about.

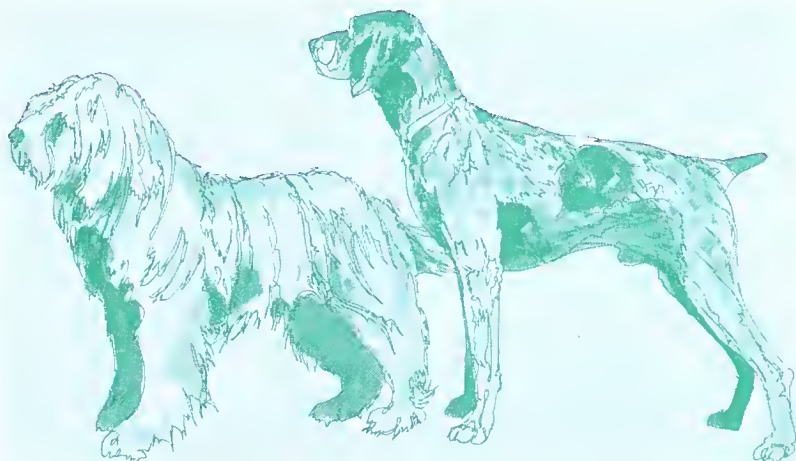
The woods were swarming with turkeys! Every one of the spots the Judge and I went to (he stayed in the car while I did the actual locating) had at least one big lonely gobbler. Most had two, one area four, and another three. I felt sure of success the next morning, even though it was my first serious attempt at turkey hunting.

According to all the turkey hunting books I had read that winter, to be a successful turkey hunter you had to be in calling position well before daylight. That's why, when the Judge was still downstairs yapping to the guy who owned the lodge at ten-thirty that night, I began wondering. Could the Judge know something I didn't? Maybe my approach was wrong.

Sleep didn't come easy. I was excited, yet worried. The Judge bothered me. It seemed he was staying up way too late to hunt in the morning. But after a few hours of tossing and turning, I finally drifted off.

The alarm clock erupted at three. It's unusual for me to leap from the sack, but I did then. After a quick shower, I slipped on my camo clothes and glanced

**ALONGSIDE my sleek shorthair Jack, Alfonso looked like a floor mop. But maybe that's typical for a schnauzer-clumber spaniel-weimaraner-peekapoo.**





### Question

Do I need a muzzleloader license to drive deer with my friends if I don't carry a firearm?

### Answer

Yes. The Game Law requires you to be properly licensed to participate, by driving deer, during the special season. A licensed archer must also possess a muzzleloader license to drive deer to a flintlock hunter.

into the Judge's room. His bed hadn't been slept in. I stood there in the darkness scratching, wondering if he was all right. A moment later voices echoed in the hall and the Judge walked in.

"Little late for hunting, aren't you?" I asked.

"Where are you going?"

"Turkey hunting, of course. You forget or something?"

"No," the Judge yawned. "It's going to rain today and turkey hunting in the rain is ridiculous."

"But the weather forecast was warm and sunny for the next three to four days."

"Trust me, it's going to rain. You go if you want to, but I'm staying here."

I couldn't see much point in wasting the morning after getting up, so I went.

At daybreak the sky was bright, pink,

and clear. Better yet, I was talking to a big old tom. But he was playing hard to get and he wouldn't come directly to my calls. He knew something was up but couldn't figure out what it was. It was as though he were privy to some information I didn't have.

Just as the sun cleared the treetops on the opposite mountain, lightning flashed and a tremendous thunderclap shook the ground. The turkey double gobbled then went silent. A moment later, the floodgates above opened and a near cloudburst drenched anyone fool enough to be out in that stuff—like me.

Since I was working a turkey, I endured it for half an hour. Then I sloshed back to the car. I tried waiting there, too, but the rain kept coming.

When I got back to the lodge, the Judge was sitting at the kitchen table enjoying a hot breakfast with the fellows he'd been jabbering to all night. I squished my way up to the table. The Judge grinned a smug little smile and shoveled another forkful of hashbrowns into his mouth.

"You were right. I should have known better than to trust my own judgement."

"That," he replied, after chewing and swallowing, "is what I thought you brought me along for."

"What about tomorrow?" I asked. "Any rain?"

"Oh, didn't I tell you—it's going to rain all the while we're up here. I'm coming back next week when it will be warm and sunny. Guess you have to work then, don't you. Too bad you can't come along."

With that, I took off my sopping cap, held it above his head, and wrung a glassful of water on him and his French toast. Then I went back to bed.

## Harder To Get

One ounce of freeze-dried king cobra venom, used by doctors and medical researchers, goes for about \$3,000—many times the price of gold.

## Hawkeye Himself

Red-tailed hawks, which have one of the keenest eyesights in the animal kingdom, can detect a mouse while flying one-third to one-half mile away.





NEXT TO LANCASTER AND YORK counties, the farmlands of Montour and northern Northumberland counties at one time provided the best ringneck hunting in Pennsylvania.

# The Ringneck Situation

## A View From the Field

By Dick Donahoe

PGC Land Manager, Northeast Region

**A**S A Game Conservation Officer assigned to an area once rated among the best ringneck pheasant-producing areas in Pennsylvania, I have so often been asked "What happened to the pheasants?" and "Where did all the ringnecks go?" that I have decided to write the ringneck story as I have observed it happening.

Next to Lancaster and York counties, the farmlands of Montour and northern Northumberland counties at one time provided the best ringneck pheasant hunting in Pennsylvania. I was assigned to this district in the spring of 1969, and found my new area of responsibility providing ideal habitat for tens of thousands of pheasants. I never thought it possible that in the next fifteen years the population of these beautiful birds would drop so drastically. But that is

what happened, and because I am a conservation officer assigned where it happened, I am asked those questions.

After considering all factors, I say this decline is the result of major changes in agricultural practices and farming methods implemented on these Pennsylvania farmlands and an increase in avian predation resulting from recent federal laws that give complete protection to all hawks and owls, thus, in my opinion, allowing their populations to increase dramatically.

The pheasant population started to decline in the Montour/Northumberland counties area during the late 1960s. Let's take a closer look at the changes. Some were subtle, others dramatic, but all affected the habitat and pheasants.

By the early 1970s, the Federal Conservation Reserve Program (Soil Bank),

the Acreage Reserve Program, and the Conservation Acreage Preservation programs were terminated after fifteen years. These programs had taken thousands of acres of farmland out of production and therefore provided undisturbed nesting and escape cover for pheasants. Most farms throughout the prime pheasant country had such set-aside acres. Now they were put back into production. During this same period, new federal and state programs provided funding to farmers to drain wet areas formerly not farmed and put these acres into crop production. Still other programs reimbursed landowners to "straighten" small meandering meadow streams and remove the "undesirable" brushy cover from the stream banks. All of these changes resulted in the loss of good pheasant habitat.

With the emphasis on increased crop production, fencerows that had separated fields for generations were re-

**BY THE EARLY 1970s, various programs which had taken much farmland out of production, and thus provided nesting and escape cover for pheasants, were terminated.**



moved to accommodate the larger machinery now needed and used in new farming practices. This eliminated valuable escape cover and travel routes needed by pheasants.

Also during this time, most township roads in rural Pennsylvania were modernized and widened to fifty feet to conform to the requirement for travel by school buses. Trees, brush, weeds, and fences were removed and the roadbanks "shaved back," thus eliminating roadside habitat that had also provided vital escape cover for pheasants and other wildlife.

### Another Change

Another great change was taking place as landowners looked for better and more profitable ways to make a living at farming. Many dairy farmers sold their herds and changed to cash crop farming in an attempt to survive.

Today, if you drive through the once-prime pheasant country in Montour and Northumberland counties, you will see thousands of acres of corn, soybean, and sorghum fields, but very few hayfields. The absence of hayfields means no nesting cover in the spring and little escape or roosting cover in fall and winter. A vital requirement for pheasants is now missing. The few hayfields you do see will not afford nesting, roosting, or escape cover because the new varieties of hays—mostly alfalfa—mature earlier, grow faster, and produce for longer periods of time. This means the first cutting is now usually about one week before pheasants normally hatch, so nests are destroyed just a few days before hatching. The new varieties of hay provide several cuttings instead of the two that were normal in prior times. The method of haying also has changed. The machinery now used cuts closer to the ground. Some hay is still baled, but many farmers now use their hay for silage or for green feeding to livestock, so this hay is cut and chopped up in the field as it is harvested. Nesting pheasants are disturbed and many are chopped up with the hay during these operations.



Because of the late cuttings, most hayfields observed during the fall and winter look more like lawns than hayfields.

There were always lots of cornfields in pheasant country; now they are much more abundant and much larger. But gone are the weeds, leftover corn, and cover. Herbicides and new harvesting methods on most cornfields leave little or no food or cover for pheasants. Many cornfields are plowed, disked, and/or planted shortly after harvest. Vital winter food and cover is now missing.

Soybeans are now a good cash crop. However, soybean fields are virtual wildlife deserts from the time they are planted until they are harvested. And after harvest, a soybean field is as bare as Old Mother Hubbard's cupboard.

Something else you will notice if you visit familiar countryside is that many woodlots and old family orchards have been removed or cleaned up. These areas also provided escape and roosting areas in years past. Many were located within safety zones and really acted as small wildlife refuges where pheasants could not be disturbed. Often, winter snowstorms were forecast by the sight of pheasants going to roost late in the afternoon, instead of at dusk, in these old orchards where they roosted in the trees.

With the loss of so much critical cover — hayfields, roadsides, fencerows, woodlots, old orchards, idle corners, wet areas, and weed and stubble cover in cornfields — predation has been made easy and its impact is a major factor on over-winter survival of pheasants in many areas. I believe red-tailed hawks and great horned owls are impacting on the pheasant flocks to such a great degree that in some areas they are the main reason pheasants are no longer able to survive to reproduce. Great horned owls can be heard hooting in most woodlots and ridges throughout the former prime pheasant range. Old-timers who live in this country — who have seen the pheasants come and now go — tell me that 15–20 years ago, "Hoot

owls were rare birds in this country."

Of course, another factor in pheasant reproduction and survival is the effect of weather conditions during nesting season. This is always a significant factor in brood size and survival of young pheasant chicks. In 1972, Hurricane Agnes and the weather conditions that followed wiped out that year's entire hatch. Spring weather conditions from 1973 through 1978 were terrible for nesting pheasants and resulted in extremely low reproductions for those years.

Rainfall during the nesting and brooding season is always a critical factor. Now a new question about this has to be asked. Acid rain is falling in Montour and Northumberland counties. Does acid rain have an adverse effect on incubating pheasant eggs? This presents an unknown factor that possibly affects nesting success.

One more legitimate question that must be asked is, "Has the increased use of chemicals in modern agricultural practices affected the reproduction and survival process of the ringneck pheasant?" We don't know the answer at this

**FIFTEEN YEARS ago, a scene like this was common in Pennsylvania's pheasant regions. Now it is unusual. In this article Land Manager Dick Donahoe gives his observations on the subject.**



time. We do know that DDT was used for many, many years because it was thought to be harmless. But studies showed that this chemical compound was turning up in the environment all over the world. It was found to be the factor affecting the hatching success of bald eagles and ospreys. The use of DDT is now banned, and the eagles and ospreys are successfully reproducing again. Some chemicals used in agricultural practices during the 1960s and 1970s are now banned as harmful. How these and other pesticides and herbicides being used at present did or could affect pheasant reproduction presents us with another unknown factor.

A more recent practice becoming more popular in prime pheasant country is the "no-till" or limited-till method of planting crops. No-till planting could be having an adverse affect on nesting pheasants that have set up housekeeping in what the hen thought was a hayfield, sometimes the only hayfield in the area. However, one morning she awakens to find the house is disappearing, dying and turning brown due to the misty rain that a machine sprayed on the field the other day—another unknown factor.

Whether the pheasant can adapt to these many changes and unknowns affecting their habitat and reverse the decline in the pheasant population is a question yet to be answered. Pennsylvania wildlife managers and research biologists are studying the situation in an attempt to find ways to help the pheasant.

The Pennsylvania Game Commission is currently researching the merits of reimbursing farmers in prime pheasant country for delaying hayfield mow-

ing until after the normal hatching period has passed. Also, new procedures have been undertaken at the Game Commission game farms in an attempt to raise a hardier and wilder pheasant for stocking.

Additional programs aimed at helping the pheasant are to be initiated, pending a much needed hunting license fee increase. One program to be funded by the new fees will be the planting of trees and shrubs beneficial to wildlife on cooperating farms. Another program might have the Commission reimburse landowners for not farming certain areas with critical small game habitat. These areas would be set aside for wildlife for a certain period of time.

One program that has already been initiated on a trial basis will be expanded. This is the wildlife seed packet program. It has met with great acceptance since it was started in 1982. Ten-pound packages of a seed mixture containing dwarf sunflower, buckwheat, millet, and dwarf sorghum were offered free to cooperators in the Game Commission's Farm-Game and Safety Zone projects. Results were so positive that most requested additional packets for 1983. Unfortunately, the program had to be curtailed in 1984 because of lack of funds.

How the ringneck pheasant responds to these attempts to compensate for the changes in their habitat will determine the future management of this valuable gamebird in Pennsylvania. Wildlife management becomes more complex as man increases his manipulation of the environment he shares with all creatures. The answer to why the pheasant is disappearing could have a profound message for all of us.

## Thoughts While Walking

*I cannot abide people who insist on substituting rules for brains.*

—Elvis Stahr, Jr.



**T**RAPPING SETS are an integral part of the sport. After all, if you can't present a situation that appeals to your target animal through either sight or smell, you're wasting your time.

In a sense, trapping sets have progressed a long way from the ones incorporated by the pioneers of Penns Woods. Gone are the days of tacking a chicken head to a tree or suspending a carcass from a limb and placing a trap underneath it. Today, trappers use flat sets, urine sets, dirt-holes, big hole sets, debris pile sets, battery operated mouse squeaker sets, flagging, etc.

It would be unfair to claim that the furbearers have changed the integrity of the sport. It would be more fitting to say that the imaginations and field observations of thousands of trappers are responsible for the array of sets used today.

Let's face it, people will be people. They are always looking for a more productive, if not easier, way to do everything in life. Trapping is no exception. Still, one choice hasn't changed through the decades. There are still two very basic types of sets—odorous and odorless.

In the odorless department, trappers have tried hundreds of concepts that basically center on catching the animal on a travel route, at its watery den entrance, through sight appeal, or by creating a situation that naturally offers the furbearer food in the wild.

Despite the wide selection of odorless sets, only a few truly offer reasonably consistent results. These are the sets that attempt to catch the animal on its natural travel route or at its underwater den entrance. The novice should forget about flagging, mouse squeakers and foil-covered trap pans. Such things were devised by bored experienced trappers—and these guys have never counted on these extraordinary methods to bring home the bread and butter from the trapline.

Blind trapping or setting traps in the natural paths of furbearers isn't a difficult practice to learn. As a matter of fact, it's one of the few ideals that

# Selecting Sets

By Joe Kosack

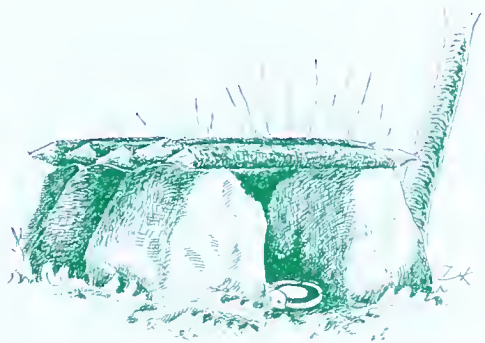
remain from pioneer trapping in this modern age.

A blind set is made by simply funneling the path of the furbearer to the point where it will have to cross your hidden trap if it wishes to continue on the path. This is done by adding rocks, leaves, branches or anything natural to the sides of the path. Your trap is then placed in the narrow area to await the animal's return.

Guide sticks can be used to get an animal into your trap. This is accomplished by placing a stick or small obstruction before or after the trap on the trail. A raccoon or fox would sooner step on the ground than on the obstruction, so it is guided into the trap.

Blind trapping works, but you have to try it to experience the results. In this day of long-distance call lures and

**IN THE odorous department, three sets—the cubby shown here, pocket sets and dirt-holes—perform the bulk of the work for trappers across the state.**



super baits, it's hard for a novice to muster faith in a trap without using some odorous material to draw the animal.

In the odorous department, three sets perform the bulk of the work for trappers across the state—cubby, pocket sets, and dirt-holes. There are other productive sets, but most are variations of these. Truthfully, these three sets, along with blind sets, will capture any furbearer native to the state, or North America for that matter.

Cubby sets are familiar to most trappers. Every beginner learns to incorporate these enclosure-type sets. Simply, the cubby set is a roofed three-walled structure, with a trap placed in its entrance. They can be constructed of just about anything found along the trapline, or can be made in hollow trees or logs; just be sure the cavity doesn't have an occupant before you set it.

It's best to blend this structure into its natural surroundings. If it's built

near a creek, sling some mud on it. In the woods, throw some leaves and branches over it. Break up the structural outline so you're not advertising your presence, or passersby and thieves will definitely inspect your structure.

Place your bait and/or lure in the rear of the enclosure. All bait should be concealed by placing it in a flat rock sandwich or spiking it into the ground with a stick and covering it with leaves. This will help deter raptors and force the furbearer to work the set longer to earn the offering. And the longer the animal works the set, the better your odds of catching it.

Cubbies, like any other set, should be placed close to a furbearer's travel route—the edges of fields and woods or along a stream or path. Keep them away from residential areas or where pet dogs and cats are known to roam.

The cubby is usually used in the trapping of opossums, skunks and raccoons, but gray foxes are occasionally taken in it too. Bear in mind, though, if you're pursuing raccoons, the cubby should be made strong as coons are notorious for making a backdoor to rob your bait.

The pocket set is used strictly on traplines associated with water. It's relatively easy to construct so long as the bank you're digging into isn't littered with rocks. This set is generally used in mink, muskrat and raccoon trapping, but on many occasions you'll find it has the ability to persuade a fox, opossum or skunk to peek into the hole.

### Pocket Set Construction

The pocket set is constructed at the water's edge of a dam or stream. It can be made with water entering the hole or placed a couple of feet away from the water on an inclining bank.

This set requires only a bank to dig the hole into. The hole, which should be dug upward on a 45-degree angle, should be approximately 12 inches deep. The hole's diameter can vary from 4 to 6 inches. A good variation of this is the "big hole set." This set, usually constructed with a shovel rather than a trowel, is simply a 10- to 15-inch di-

**TRAPPING SETS** have progressed a long way from the days of tacking a chicken head to a tree or suspending a carcass from a limb and placing a trap beneath it.





imeter hole dug about 18 inches into the bank at the water's edge.

The bank surrounding the entrance to either hole should be slicked down with a wet hand to give it that "aged appearance." To further enhance the set's appeal, take a small stick and scratch the hand-smoothed area to make it look used.

Bait should be placed at the deepest point of the hole above the water level. I spike my bait to the wall or ceiling of the hole so a coon's groping paws can't get the goodies before I get him. To add a finishing touch, smear a dab of lure to the upper edge of the hole.

### Off-Center

The trap should be placed off-center just outside the entrance to the hole, anchored in deep water or attached to a drag. It's always a wise choice to use a No. 1½ coil spring trap at this set because you never really know what type of furbearer will visit the set first. But one thing's for sure—this set rarely if ever catches dogs or cats. Dogs stand too far away from the trap when investigating the hole, and cats just won't get their feet wet for a meal.

The dirt-hole is probably the most universal set. It has the capability of catching any furbearer in the state except the beaver and muskrat. The dirt-hole which is believed to have been developed by E. J. Daily, a professional trapper from New York State, is still considered by many as the deadliest set for fox.

Dirt-holes are usually constructed at edges, such as the edge of a field, the woods, a stream, a trail or fencerow. There are occasions though, when a trapper will make the set away from the edge and use a long-distance call lure to pull the target animal into the set area. This practice usually occurs when a section of the trapline is overloaded with skunks or opossums.

This set is easy to construct when the soil isn't rocky. To make it, dig a hole on a downward 45-degree angle, roughly 10 inches deep, in front of a low backstop such as a grass clump, rock,

chunk of wood or small bush. As a general rule, the backstop should be no higher than 6 inches.

Trowels are usually used to excavate the hole, but in rocky areas, you might want to hammer a stake into the ground and move it in a circular fashion to make your dirt-hole. Regardless, its diameter should be from one to 4 inches.

After digging the hole, it's time to dig the trap bed. Excavate an area large enough to bury your trap in and make it roughly 4 inches deep. As you remove the soil, place it into your dirt sifter. Next, sift some dirt into the excavated trap bed to properly bed your trap in. Pick up your trap, with stake attached, and hammer the stake into a corner of the bed. Now set your trap and bed it firmly.

Bedding the trap properly is crucial to your success. To be sure you've done the job properly, take a stick and press around the circumference of the trap's jaws. If it tips, stabilize it. The reason for this fuss? Basically, you never know where a furbearer will step when it

**OPOSSUMS** are one of the animals often taken by Pennsylvania trappers. Others include raccoons, skunks and both red and gray foxes, as well as muskrats, minks and beavers.



**This publication  
is available  
in microform  
from University  
Microfilms  
International.**

Call toll-free 800-521-3044. In Michigan,  
Alaska and Hawaii call collect 313-761-4700. Or  
mail inquiry to: University Microfilms International,  
300 North Zeeb Road, Ann Arbor, MI 48106.



approaches the hole. If your trap pops out of the soil when the animal steps on the trap jaw, it knows something is amiss underfoot.

Next, sift dirt over the trap until the trap bed is level with the surrounding ground. Be sure to use some sort of material, such as fiberglass screening, to keep dirt from getting under the trap pan. As a finishing touch, gather some surrounding ground material and blend your trap bed into the area.

Rubber gloves should be utilized in this entire process if you intend to trap foxes or troublesome raccoons. Otherwise the sets can be made barehanded.

Finally, the attractors are added to the hole using your bare hands (you don't want to get bait odor on your set-making gloves). Place your bait or lure in the bottom of the hole. No spiking is necessary. Finally, if you're trapping foxes, add six to ten drops of fox urine to the backstop or a smear of fox gland lure to the top of the hole. Double these quantities in extremely cold weather.

The sets described in this article are not to be considered the final word on trap sets. They are the basics to successful trapping. As time goes by and your experience grows, you will create variations for these sets and concoct a few of your own. Just remember one aspect of set construction—the further you look, the more you'll find to incorporate on your traplines. So don't ever stop looking or being creative.

## GAME NEWS

Enclosed find check or money order for \$..... for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW

☐ RENEWAL

(Check One)

ACCOUNT NUMBER

In U.S. ☐ 3 Years \$16.50

☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

Name .....  
(print plainly)

Address .....

City ..... State .....  
(Zip Code)

NOTE: All remittances should be made payable to the  
PENNSYLVANIA GAME COMMISSION

Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
DO NOT SEND CASH

Please allow 60 days for first copy.



# When It Comes to Long-Range Chucks...

By Nick Sisley



**A REMINGTON 40X action fitted with a heavy stainless steel barrel and weighted fiberglass stock—painted blaze orange!—and chambered for the hot 25-06 cartridge is Sisley's pet long-range outfit.**

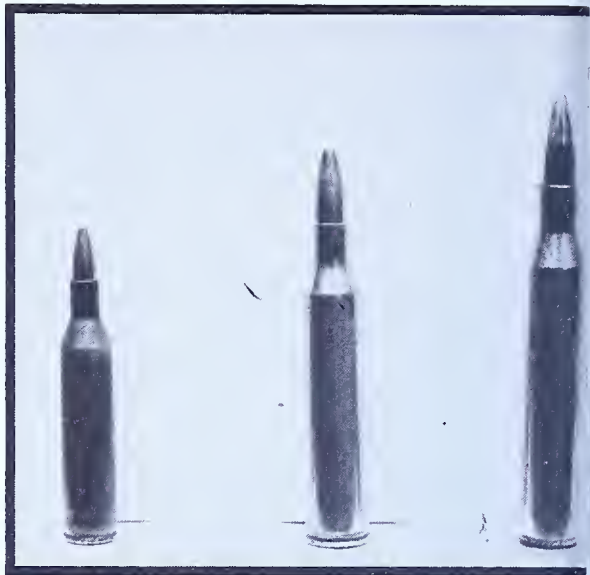
**T**HE freshly cropped clover field sloped gently downward and away from me, stretching almost 200 yards to the step-across stream below. Then other huge hayfields continued up the other side of the valley for several hundred yards, to the woods line, where the contour of the land steepened. Chuck shots, with maximum range possibilities of more than 400 yards, stretched right and left, as well as straight ahead. It wasn't 22 Hornet country. This wood-chuck real estate was made to order for bigger medicine.

A breeze out of the west tilted the tops of the short clover, and a bright sun had the greenery shimmering and sparkling. The air was blessed with varying aromas of fresh hay, a dairy cattle barn, pines and hardwood forest. It was quiet, save the constant breath

of the wind and the occasional sound of farm equipment several hundred yards up the dirt road at the farm buildings. Eighteen wheelers? None!

One couldn't have picked a better day to be out in June. I had been on groundhog hunts in this type of long-range situation before—and been undergunned. However, for this, my first serious chuck venture of the summer, I was outfitted with a new rifle, one I felt was ideal for any 400-yard and plus challenges the afternoon might offer.

In my glasses I picked up a flicker of movement just on the far side of the narrow creek. I concentrated on the spot and soon picked up the ear, then the eye, of the coarse-furred quarry of the day. Soon the little critter emerged fully from his hole and stood erect. My rifle was already on its rest. I only had



**SISLEY, left, displays a double handful of chucks taken with Ruger No. One 25-06 wearing 16x Leupold. Above photo shows comparative sizes of 17 Remington, 220 Winchester Swift, and 25-06 Remington. Big case is needed to move big bullet.**

to stretch myself prone and swing the muzzle slightly to get it aligned with the target.

I leveled the thin crosswires of the 16x Leupold low on the chuck. The range I estimated at 200 yards, only a tad farther at most. My new rifle, a flat-shooter sighted in to print its bullets 3½ inches high at 100 yards, would still shoot high at 200. Figuring on a neck hit with my low hold, I moved to the right side of the critter's body to allow for the slight wind, then concentrated on keeping the crosswires steady.

It didn't take much pressure on the trigger—it breaks at two ounces. The gun racked back. The sight picture in the scope blacked out briefly, preventing me from seeing where the bullet had struck, but a second later I had my target back in the big scope. The chuck was on his back. He kicked and rolled to one side. Then the tail came up in its characteristic reflex twitch.

A 200-yard shot wasn't much of a test for my new outfit, however. When I saw a groundhog even closer, I passed it up, preferring instead to try yet another

one which had just come out. He was a good hundred yards farther than the one I'd just shot, in the same field across the creek, a bit more to the right.

Again I eased the big Leupold's crosswires into position, looked alongside the scope to re-estimate the yardage, and, this time, held the horizontal crosswire right on top of the chuck's head. With the vertical crosswire some six inches into the wind, I held as hard as I possibly could. The light, no-creep trigger again meant little time was lost in squeezing off. Recoil again caused scope blackout. A moment later I was rewarded with a sight similar to the previous one.

Two more chucks came out at fairly close range. I wished for my Thompson/Center 223 Contender. With its scope sight, the single shot handgun would have been perfect for these. The Contender, however, was at home and with the big gun I had on the rest, 100-yard shots were no challenge at all.

It took 30 minutes of continual glassing before I found another chuck to try.



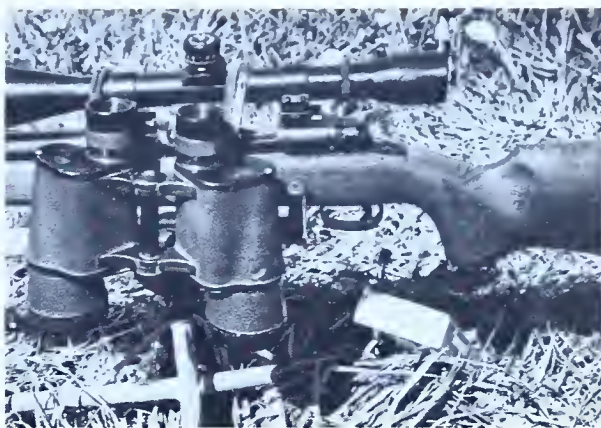
Farther than the second shot, I figured this one was close to 400. The wind had picked up a bit, and I kept that in mind as I lay down prone and settled the big gun onto the target. Knowing my chances for a hit weren't good on this shot, I settled the butt more solidly against my shoulder, hoping to recover from scope blackout before the bullet hit. If I missed I wanted to know where—high, low, right or left.

At 400 yards I knew I'd be 12 to 15 inches low, and the way the wind was blowing, I judged it might drift my bullet more than 12 inches. I placed the jointure of the crosswires an estimated 15 inches left and 12 inches over the chuck's head, squeezed gently and the bullet was off. As I'd hoped, I recovered from the recoil in time to see the little pill strike—not the chuck but the ground—just past the critter's left ear. I hadn't played quite enough wind, but it wasn't bad getting a bullet that close on my first try. The chuck dove for the safety of his hole instantly. No matter. I knew he'd be topside shortly, offering another long-range chance.

### First Time

I was using Big Bertha for the first time that day. My specialized long-range chuck medicine was a 25-06 Remington, a cartridge I consider the ultimate among commercially made options for this type of work. Bob Cassidy, a hunting buddy, had convinced me of the 25-06's worth on previous hunts. He made himself a custom job in this caliber years ago, and I've seen him do some unreal shooting in long-range chuck country. In time I acquired several 25-06s. More about them shortly. Big Bertha has to be considered my ultimate, however.

It began life as a Remington 40X, with heavy stainless steel barrel. I then had Lee Six of Six Enterprises in San Jose, Calif., make me up a special fiberglass stock. Lee took his Shilen model, then added six pounds of lead in the stock's fore-end. The idea was to produce a chuck gun with a lot less recoil than the 25-06 typically delivers. This



**HEAVY SAVAGE 112V** is another 25-06 in Sisley's long-range battery. He feels the heavy 25-cal. bullet performs better in the wind than those from the center-fire 22s such as the Swift and 22-250.

was not to be woodchuck ordnance for carrying into the far-off back pastures. I have other 25-06s for that. I would be setting Big Bertha up in a field, with a rest, and staying there awhile.

Once the stock arrived from Lee Six, I took it and the 40X with its big stainless steel barrel to stock specialist Jim Peightal, of Ernest, Pa. Jim carefully fitted the 40X barreled action into the fiberglass stock, then painted it for me—glossy blaze orange. At that time it had just become necessary to wear at least 100 square inches of fluorescent orange clothing while woodchuck hunting. I figured a blaze orange rifle would make me even more conspicuous to other hunters. Also, being a writer, I knew Big Bertha would stand out in color photos.

This rifle doesn't produce one-hole groups (how I wish it would), but varmint shooters don't need that type of benchrest accuracy, even for long-range chucks. It will shoot well under an inch consistently, and occasionally I can pull off one of those half-inch groups that look so nice, when I'm right and everything else is right.

Why the 25-06 for long-range chucking though? Why not a 22-250 Remington or the 220 Swift? Why not one of the 6mm's, like the 243 Winchester, 6mm Remington or 240 Weatherby? How about the 257 Roberts? The 264

Winchester Magnum? The 270 Winchester? Even the 30-06 or 7mm Remington Magnum?

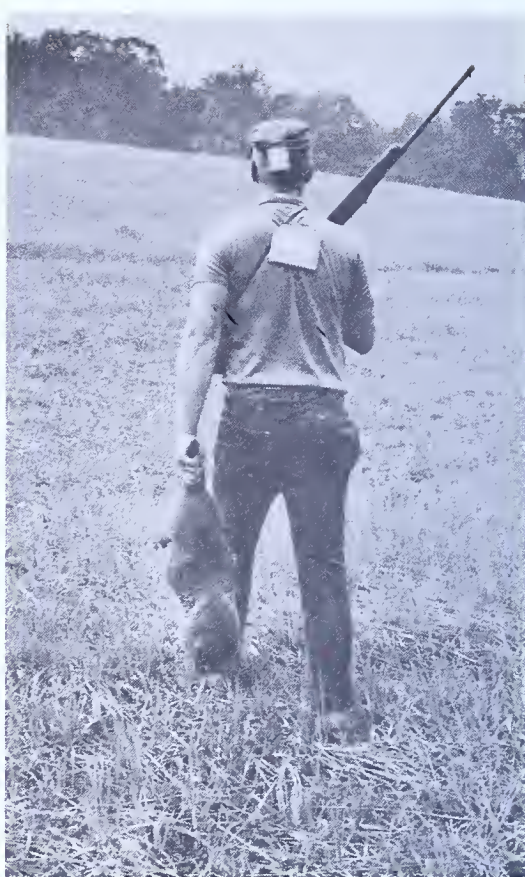
The arguments are endless on this subject. Eventually we could get into one of those “Which is better—Ford, Chevy or Plymouth?” debates. For chuck hunting beyond 300 yards, you need a bullet of reasonable weight. Trajectory is not the problem in this context, but wind deflection. A 50-grain bullet is blown roughly twice as far off target at 400 yards as a 100-grainer, maybe 25 inches for a 50-grain out of a 22-250 Remington in a 10 mph cross-wind, compared to less than 15 inches at that same range for a 100-grain 25-06 handload. Estimating 15 inches, through a scope, at 400 yards, is tough. Making 25-inch estimates is far, far tougher. Successful long-range shooting requires attention to detail, precision. The heavier bullet simply allows the rifleman to be more precise at the longer ranges I’m talking about.

With the 25-06 we can even go to the 117- or 120-grain bullet, but here we have to sacrifice a bit on trajectory. Bob Cassidy and I both feel the 100-grain bullet is the best for long-range shooting in the 25-06—the best balance of trajectory and wind bucking qualities. I have my best luck with the 100-grain Sierra. Cassidy likes this bullet, and also the 100-grain Nosler solid base.

### Sacrifice Trajectory

In the 243, 6mm and 240 Weatherby, we can also go to a 100-grain bullet, but here again we sacrifice trajectory to get that bigger bullet’s wind bucking properties. Many think the 85-grain spitzer bullet is the absolute best for the 6mm calibers, the perfect marriage of optimum trajectory balanced with the best wind bucking properties.

The 257 Roberts doesn’t have the powder capacity of the 25-06 Remington, thus it can’t achieve the bigger round’s speed and resultant flatness of trajectory. Of course, both use the same diameter bullets. What about cartridges even bigger than the 25-06? The 264



**FOR walk-'em-up hunters, light rifles, even with iron sights, can do the job on chucks. Stalking has an appeal of its own, but Sisley usually prefers to shoot them at long range.**

Winchester Magnum has to be close to tops. Its 120-grain spitzer could be better than the 25-06’s 100-grainer—the 120 having similar trajectory characteristics, but, due to heavier weight, even better wind fighting qualities. Problem is, no commercial gunmaker offers the 264 in a heavy barrel version. The U.S. Repeating Arms does have the Model 70 Sporter Magnum, which has a standard weight barrel, but that’s not ideal for varmint shooting. Of course, one could go the custom rifle route with a 264.

The 270 could also be great, but again, no commercial gunmaker builds a heavy barreled 270. Also, the 100-grain 270 bullet doesn’t have the best ballistic coefficient, and the 130-grain is a tad heavy. A 120-grain hollow-point boattail, if available, could be just about the perfect 270 long-range wood-chuck bullet. It would have to be a



heavy rifle to produce minimal recoil, however. My scoped Big Bertha 25-06 hefts 17 pounds, and the recoil produced by a high stepping 100-grain bullet is hardly noticeable.

The 7mm Remington Magnum, the 30-06 with bullets in the 140- to 165-grain class? Again, recoil is the problem. A varmint rifle in either of these calibers would have to weigh at least 15 pounds to suit me. Of course, I'm a sissy when it comes to getting bashed in the shoulder by a big gun.

The great thing about the 25-06 is that a dedicated varmint hunter bent on trying his hand at long-range stuff doesn't have to invest the time, effort and money it takes to come up with a custom job. Several gunmakers offer commercial versions in 25-06, and there are even more on the used varmint gun market.

My first 25-06 was a Ruger Number One single shot, the 24-inch heavy-barrel version. At the same time I acquired that rifle, I also purchased a 16x Leupold scope. This Ruger is an excellent long-range rig at a reasonable price. Its single shot design makes this model excellent as a varmint gun, from both the safety and the esthetic standpoints.

The Ruger Model 77 bolt action varmint rifle, the one with the heavy 26-inch barrel, is available in 25-06, too. Even without a scope it weighs 9 pounds. At slightly over 10 pounds scoped, such a gun is certainly capable of absorbing much of the recoil a 25-06 dishes out.

My second 25-06 was a Savage 112V, another single shot model. I have it decked with a Weaver K12, and it has bowled over many a hayfield pig. With the heavy barrel and scope it weighs

Nick Sisley is the author of *All About Varmint Hunting*, an excellent book about hunting woodchucks, prairie dogs, crows and foxes. He covers the subject from A to Z, with in-depth information on varmint rifles. Autographed copies available from Impact, 509 First St., Apollo, PA 15613. \$10.45 delivered.

right around 10 pounds. I wouldn't want to carry it all day in the hot sun, but it is reasonably portable—far more so than Big Bertha.

The Remington 700 Varmint Special has to be one of the best guns on the market for a dedicated woodchuck hunter. It has a reputation for outstanding accuracy. It, too, is available in 25-06. I doubt that a varminteer thinking about long-range chucks in Pennsylvania could make a better choice, if he topped it with a 12x or 16x scope.

Of course, anyone wanting to go the custom gun route has lots of action choices, in conjunction with many choices in top barrel makers who offer heavy weight jobs. The stock on a custom varmint gun can be solid walnut, laminated or fiberglass. I'm told the benchrest crowd highly favors fiberglass these days. It doesn't warp, so the rifle maintains its point of impact indefinitely.

Since that ideal June day when I first tried Big Bertha on long-range chucks, that gun and I have made many visits into summer chuck country. Maybe you and I will meet out there someday. You'll probably recognize me, for I no doubt have the only blaze orange 25-06 Big Bertha in existence!

---

## PFA Woodland Owner's Handbook

This is a complete reference book on woodland management. It covers all aspects of this subject from the landowner's viewpoint. From the Pennsylvania Forestry Assoc., 410 E. Main St., Mechanicsburg, Pa. 17055, \$14.75 delivered.





# The Great Rugged Valley Brush, Bramble, and Timber Charge

By Edward Karasek

**S**HE STOOD firm on the far hillside, face glowing like a cool summer sunrise, hair slow rippling in the breeze like honey. The wee puppy she held to her shoulder nuzzled her neck and quietly grunted and squeakily yawned. The men lining the gravel and dirt road like roughhewn fenceposts stared across the valley at her. Now, were these fine flanneled gentlemen interested in the radiant young beauty in the distance? Not quite. Each man was present for one reason only — each one wanted and was willing to mightily struggle for ownership of the tiny puppy.

Sam, owner of Sam's Kennel and sponsor of an outdoor program on a local radio station, hustled up and down the dusty road, backslapping each of the sixteen competitors and passing out leaflets to the wives, girlfriends, sons, and buddies who thronged the roadside. Sam was the sole sponsor of this year's Rugged Valley race and, not surprisingly, a full-bred beagle pup complete with papers was the prize. Sam's reputation as a raiser of fine hunting dogs was well known throughout the county and he was pleased with the attendance.

Suddenly, Sam hopped atop a stump and waved for everyone's attention. "Friends and neighbors," he began, and everyone listened. "The winner of this contest shall be the first man to reach my lovely daughter on yonder hillside. He will immediately become the proud owner of the perfect pedigree hound clutched tenderly to her bosom. Each contestant shall navigate cross valley in

an approximately bipedal manner. One's feet shall provide the only locomotion and wheels, wings, ropes, rockets, or other nonambulatory elements are expressly forbidden. Those are the rules and there are no others. Simply put, outdoorsmen and doglovers . . . it's a footrace."

At the center of the line of racers, Toby Phillips waited, unbalanced and gangly, impressed and uncomfortable. He stood half a head taller than most but failed to carry his weight as surely, standing like a novice on rollerskates. As usual when nervous, he was polishing his bottle-bottom glasses. Without them, he was a ship in the fog. Toby shifted his weight, smiled tentatively at the men standing to either side of him. "May the best man win," he stammered.

## Stolidly Shuffling

Booster Kable stood stolidly in the shuffling dust next to Toby. His gaze traveled down the hill, across the valley and up the opposite hill. The trackless expanse of rough brush and close forest brought a low grumble from him. Not a break, path or clearing was in sight. He turned slowly. "Just remember," he said, staring clean through Toby at Crank Johnson who was standing to Toby's immediate left. "Don't hunt bear unless you expect to find one."

Crank Johnson eyed Booster Kable's tan, curly-haired, shirt-stretching frame, then pictured his own taut, wiry body and wondered if he stood a chance. He almost wished he had signed for a four-



**THERE WAS A sound like an approaching freight train. A giant of a man came whooping and crashing through the wilderness, another dodging along behind him.**

wheel-drive race instead. Finally, he sighed and leaned back against his giant gleaming pickup. "Sure, friend," he muttered, maintaining Toby's transparency. "You shuffle pretty, but let's see if you could play cards."

As Toby tried to make sense of the others' comments, Sam the kennel-keeper split the air with a shrill whistle. The girl across valley raised a slender arm, then suddenly slashed it down. With a joint mighty leap, the race was on.

The racers sprinted down the steep grass and scabble hill into the overgrown valley. Shirttails flying, they sailed over several dry spring runoff ravines, clods of turf arcing through the air from their churning boots and blurring feet barely keeping up with their bodies. Booster and Crank were soon leading the tight herd, with Toby charging wildly to bring up the rear. Then the dense pack of runners hit the forest wall.

Like a breaker on a rocky beach, they crashed to a near stop in the patternless brown and green growth. A brief moment of grunting confusion followed. Toby had abandoned himself to a helpless heel skid and was debating the consequences of hitting the milling mass of husky woodsmen when a shin

high encounter with a grass hidden log let him evade the entire issue. Emitting a high pitched howl of terror he was launched over the crowd. He rolled into an impressive head over heels full flip and disappeared into an evil-looking patch of briar and thorn. Several men scratched their heads at Toby's awesome airborne acquisition of the lead, then split off alone or in involuntary groups, each person taking what he hoped to be the path of least resistance to his goal.

Crank ignored the others and crouched low to peer around at ground level until he spotted an almost-game trail which vanished in the briars. He dropped to hands and knees, then to belly, and began to crawl along the trace, the back of his head tangling in the ceiling of brush. He was congratulating himself on his woodsmanship and the way he was slowly but surely covering ground when he came upon a strange glint of metal. It was a small dimestore compass. Puzzled, he pocketed it and some loose change he saw nearby. A foot farther on he barely missed crushing a thick-lensed pair of spectacles. He recognized them and chuckled knowingly.

### Struggling Grunt

Suddenly the bushes shook and he heard a struggling grunt. With a grin he craned his neck and looked up. He found himself eye to eye with a tall, awkward man. The man was suspended upside down, dangling by thorn-torn clothes. He was twisting like a cat in a tight wool sweater, and every so often a shirt button pinged off into the dry leaves. Crank laughed loudly once, patted the man on the head and wished him luck. Then he squirmed down the path on his belly, Toby's glasses clutched firmly in one hand.

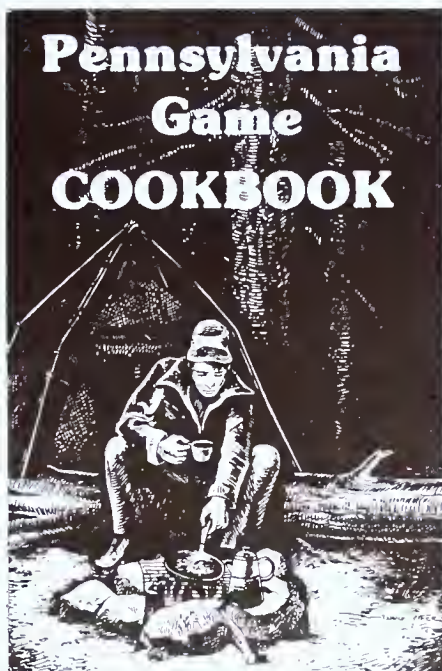
Perhaps twenty feet to Crank's left and totally unaware of anyone else's presence, another man was crawling swiftly through the briar patch. Supremely confident that crawling was an original idea, he was whistling happily through his teeth. He was scram-



bling steadily along when at the far edge of the briar patch he came to a giant fallen tree supported the width of a thin man off the forest floor. Immediately showing why his neighbors thought of him as a decision making man, he commenced crawling under rather than over it. He sucked in his belly, pushed beneath the trunk, and was soon nearly halfway under. But somehow in the process, a rotting branch support was broken and the tree settled precisely two inches, pinning the man harmlessly but securely to the ground. He sighed, frustrated, and began to dig the soft humus from under his hips.

He huffed and puffed and dug industriously. He was just beginning to make visible progress when he heard something similar to an approaching freight train. In moments a giant of a man came whooping and crashing through the jungle, with another squinting, whirling, dodging man a few feet behind him. Booster was running all out, leaving mayhem in his path. One arm protected his face and the other was outstretched to clear a tunnel. Twigs and branches whistled and snapped and whipped off of him, near missing and occasionally slapping the dancing man behind him. In seconds they disappeared into the thicket ahead, with Booster slowly expanding his lead over his follower.

The tree-tied man once again concentrated on his digging. He concentrated so hard he did not even notice Crank crawl around the log, climb to his feet and speed off into the woods. Three heartbeats later, a tall flapping-buttonless-shirted man elbowed and kneed his way from the brush and slammed headfirst into the log. The log quaked but held steady. Toby tenderly rubbed his head, then reached out to feel the log like a blind man reading braille. He gritted his teeth, dug his fingernails into the bark, and pulled himself up and over the log. The log settled with a faint moan, once again pinning the man beneath. As he began to sob pitifully, Toby creakily rose to



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by **GAME NEWS** readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from **GAME NEWS** office.

his feet and with arms outstretched plunged unsteadily but swiftly away.

The center of Rugged Valley was an incredible entanglement of plant life that even the most stalwart inhabitant of the old Belgian Congo would have found heartbreakingly disorienting. Sam and the spectators on the high dusty road tiptoed back and forth, whispering amongst themselves, but could no longer see any sign of the racers. Several heated arguments broke out over which friend or whose husband was in the lead. Gradually, the spectators began to separate and climb into cars and pickups for the long roundabout ride to the other side of the valley and the finish line.

Crank raised an eyebrow at the mon-

ster tree now standing in front of him. He was fairly certain he had previously noticed an ancient tree towering over its companions near the middle of Rugged Valley. He decided he would check his bearing. He clawed up the thick trunk and soon had a bird's-eye view of his surroundings.

The gentle breeze at this altitude was a pleasant contradiction to the muggy closeness below. In a daring mood and in need of a short rest, Crank sat, legs dangling, far out on a bending branch. Directly ahead, through a latticework of foliage, he could see the girl and the puppy and the settling dust of the spectators' arriving cars. He waved and was mildly disappointed when he received no return gestures.

Crank twisted in a circle, wondering about his competition. At first, nothing. Then, looking off to the side several hundred yards, he saw three men pulling and shimmying along a thick woody vine that stretched up a steep crumbling bank. They reminded him of a mountain climbing cartoon, and he pictured them planting a flag at the summit of the bank. He had nearly drifted into a tired dreamworld of christening champagne bottles and victory parties when a man suddenly ghosted from the thicket at the top edge of the embankment above the men. It was Booster. He stood tall over the men, the caricature of a madman, pocket-knife glinting in hand. He bent and with a single jerk severed the vine. As the men tumbled in a soft swirl of dust, he turned and stepped behind the veil of forest.

"Ahhh, the old cutting-the-vine-whilst-your-opponents-cling-to-it trick," Crank whispered approvingly. Then he heard a grunt and a mumble beneath him. Balanced on his heels and head between his knees, he peered down to see a tall ragged man zigzagging along, open shirt flapping. Toby stumbled under and past, miraculously missing all trees, muttering something about far horizons and ships passing in the night.

Crank frowned, puzzled. Then much

to his surprise, the branch he was on cracked and he plummeted to a one-point landing in a soft bank of moss, mushrooms, and skunk cabbage. He lifted his head from between his knees and wiped the squashed slime, green, and dampness from his eyes just in time to see Toby carom off a tree and trip over a scrubby rise.

Along the finish line, just behind the waiting girl and puppy, the crowd stretched and craned and cheered as flashes of red flannel to the right, then a glimpse of blue jean to the left, were momentarily visible below. The racers moved through the dense growth in a wide skirmish line, though the closer they got to the uphill charge to the girl, the closer the line was pinched. The tattered men were storm-cloud grim and fiery-eyed, and each reached for that special mental plateau that would place him beyond mere physical pain.

Like water through a funnel, the men in the lead came together, forming a loose group that moved faster and faster. Now the men still in the thicket were lost, all chance of catching the lead gone. Booster and Crank ran in front, three men fought for the middle and, amazingly, Toby still staggered, stumbled, and trotted along just to their rear.

### Nearly Home

Booster strained. Each breath whooshed out in a great gust. He was nearly home but he could feel Crank's gasps on the back of his neck. Ahead, through the thinning wood, was a shallow dip, then the short hill to victory. At the top of the dip, Booster howled in heroic defiance of everything and leaped through the air.

Crank plowed ahead, head bowed, interested only in putting one foot in front of the other, so he didn't see Booster catch a sapling about seven feet above the ground and swing gently to the opposite of the gully. Booster unleashed the straining sapling and Crank didn't figure out what hit him until several minutes after the race was over. When he dropped to his knees, he



took the men behind him to the ground and in a tangled cluster of flailing arms and catfight yowls they all rolled to the bottom of the gully. Toby unseeingly clumped past the fracas, unscathed and wondering what the fuss was about.

The crowd on top began to hop and cheer as Booster backpedaled furiously, smugly watching his vanquished competition scuffle at the bottom of the hill. Toby was at least twenty feet behind and the rest of the men were barely breaking out of the brush. Trees flashed by to either side, but Booster's biggest concern was what he was going to feed his puppy. A friend in the crowd bel-  
lowed, and Booster, still traveling at top speed, coolly swung around just in time to see the low hanging branch that neatly clothes lined him. The branch caught him on his hard forehead and he covered the next three feet horizontally, feet forward. He rolled to a stop in the sun-browned grass, weaving a lopsided grin and blinking through countless orbiting celestial bodies visible only to him. A moment later, Toby wandered by and into the congratulating arms of Sam the kennelkeeper.

It had been a fine race. The crowd was happy, Sam was happy and, as the puppy licked Toby's hand, he too was



**THE CROWD** was happy, Sam was happy and, as the puppy licked Toby's hand, he too was happy. After accepting a kiss from the innocent beauty, Toby wandered off into the distance, puppy on one arm. . . .

happy. The straggling men climbed the hill like battle weary soldiers and Toby shook hands with all, for it had been a race in the best backwoods tradition even if he hadn't seen much of it. And after Crank sheepishly handed him his glasses, Toby accepted with a blush the earned kiss from the innocent beauty on the sun bright hillside, then wandered off into the distance, the puppy gently cuddled in one arm . . .

**POTTER COUNTY DGP Ron Clouser** receives the Shikar Safari Wildlife Officer of the Year Award for 1984 from **Soski Piroeff**. Clouser, who has been with the Game Commission since 1965, served in Montgomery and Lycoming counties before being assigned to Potter County in 1973.



**Outdoorsmen—**

***Don't You Need Something Like . . .***

# **My Take-Along Fix-It Kit**

**By Fred Bouwman**



**J**UST A FEW of the hunting gear mishaps I've witnessed include cartridges stuck in tubular magazines, shotguns in dire need of disassembly and cleaning after dumping the canoe, and frozen rifle actions as a result of one of those rain-and-freeze deer seasons. If something of this nature hasn't yet happened to you, rest assured it will.

My response to such things is a simple gun and bowsmithing repair kit that stays in my truck. I don't have much money invested in it, so can leave it with the odds and ends in the back of the pickup. Nevertheless, it's complete enough to be adequate for most

field and lakeside repairs. The whole thing wraps up in an army surplus tool roll (a \$3 investment) and measures about a foot in length and five or six inches in diameter.

For firearms cleaning and minor repairs, I keep a 22-caliber rod and a selection of brushes and jags to fit both the smallbore and my larger rifles. A handful of patches, a small vial of oil, another of cleaning fluid and an old toothbrush, and I'm in good shape in the cleaning department.

Maintenance items for archery trips include a couple of broadheads with inserts and some spare razor inserts (archers who never miss can leave these



at home), a bowstring with nocking point installed, an arrow rest, a compound bowstringer, and a file for touching up broadheads.

For tools I have a reversible Phillips-to-blade gunsmith's screwdriver, a pin punch, and needlenose pliers. Season before last, one of my deer hunting party asked about a hammer for removing his fogged scope. When it clouded up again last year, he put in his request again, and I think he was serious this time.

Scope problems I am not equipped to handle, and don't plan to start. Next in line during the deer season are problems with iron sights. These I deal with as best I can with a stick of hot melt archer's cement, which I consider one of the most important parts of my kit. The stuff will bond to almost anything, and stays like it belongs there until you heat it up again to get it off.

An associate and I are planning a

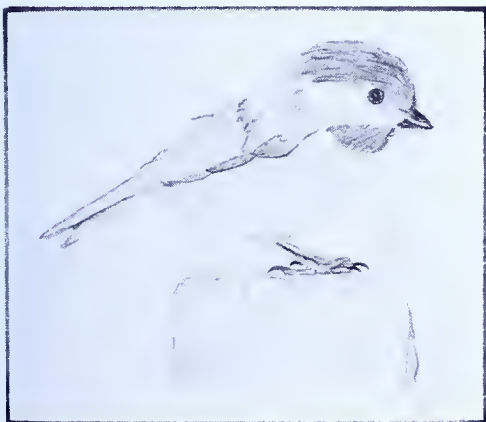
backpack bowhunt for elk and mule deer in Colorado next fall, and with us will travel an abbreviated version of my sportsman's fix-it kit. With weight considerations in mind (that won't make me shoot at only small elk, however) I'll make do with a keychain screwdriver, hot melt cement, a small sharpening stone, the broadhead inserts, arrow rest, and the bowstring and stringer.

The last couple of times the kit was opened up were to remove a stuck case from a lever action 30-30 and to replace a rod tip on the pole of an over-enthused steelhead fisherman. We spent our day in these cases seeking deer and fish instead of gunsmiths or tackle shops. Put a few tools and spare parts in with your outdoor gear. On more than a few occasions my kit has been the difference between spending the remainder of the day driving into town or staying in the woods where I belong.

## young artists page

**Stephanie Moyer**  
Harleysville, Pa.  
Indian Valley Junior High School  
7th Grade

**Glenn Dunlap**  
RD1, Honey Brook, Pa.  
Twin Valley High School  
10th Grade



# SUMMER

*Many Pennsylvanians visualize it's pheasants or grouse or c... guns and boots. But for a c... species that pinpoint their... This is the game that requi... scope-sighted, high-velocity... if the shooter does his part... shooters of any age become*

*about a... squeezing... —may... quired... With... hunter... is that... gunners... tures... occasi... presen...*



**SOMETHING** all chuck shooters learn quickly—you spend a lot more time looking than shooting.





# S TARGETS...

by deer when they think of hunting. For others, rails that come to mind when they check their feed minority, it's not the autumn and winter st, but the targets of summer—woodchucks. The utmost in accuracy—rifles chambered for edges that can hit a tennis ball at 300 yards t's in Pennsylvania's meadows and fields that ven who can consistently do that. They learn zeroing and holding and ad how to use binoculars hour of glassing is re- erage, for each shot fired. n investment, a chuck waste shots. His attitude sniper, not the machine o he haunts the back pas- warm evenings, only an stant shot signaling his y not join him?



**AFTER THE** looking comes the setting up, the aiming, the squeezing. Then the long hike to pick up one of the summer's targets.







# FIELD NOTES



## Patch, Fill, Seal

**DAUPHIN COUNTY**—During the winter, game protectors get a lot of calls concerning wildlife that have taken up residence in homes. These nuisance animals often enter through foundation cracks, loose flashing openings, and under eaves. It pays to check your house and repair such defects. Making your house animal proof will also make it weather proof, and a person can never do too much of that. —DGP Skip Littwin, Hummelstown.



## Most Unusual

**ERIE COUNTY**—Over the years I've received several reports of bears in the county, but my latest was, in two aspects, the most unusual. First, most of these reported sightings have occurred during the bears' breeding season when they're most active, but this latest sighting occurred in February when bears are supposed to be hibernating. Second, this February sighting was made in a suburban area, only a few miles from downtown Erie. —DGP Andy Martin, Erie.

## Beneficiaries

**INDIANA COUNTY**—Have you seen the television ad in which a famous TV actor tells us that a 45-year-old man can buy over \$40,000 of life insurance protection for 67¢ per day? Did you know that for about 5¢ per day you can, regardless of age, join over a million other Pennsylvanians by purchasing an invaluable "life insurance policy" for wildlife? These prices are low because they are group rates. And as a "policy holder" you also receive bragging rights as a wildlife conservationist and are entitled to hunt in the Number 1 hunting state in the nation. This is really what your hunting license dollars do. Support the proposed hunting license increase—wildlife needs it. —DGP Mel Schake.

## Continuing Help

**LEBANON COUNTY**—While I was on duty at the Eastern Sports Show in Harrisburg, a fellow told me that when he was fishing on the Susquehanna on a warm fall day, he saw a rock move. As he got closer he found it wasn't a rock, a duck, or a muskrat, but a squirrel stranded on a rock in the middle of the river. When he and his partner rowed over the squirrel jumped into the boat, crawled up on the gunwale and sat there as the boat headed for shore. About 150 feet from the bank the squirrel jumped out and tried to swim the rest of the way, but it started to struggle so the fisherman offered an oar. The squirrel accepted. Once ashore, the squirrel jumped out, scampered up the bank, and took off. —DGP Gary W. Smith, Lebanon.



## It Split in Two

**YORK COUNTY**—A parent recently reported hearing some children talking about a wild animal being mistreated. It seems a 10-year-old boy had told his classmates he had gotten a baby mountain lion and did not have a place to keep it, so took it to his grandparents' house. The boy said he went to see it once a week, and that it was getting very big. When asked what it was fed, he said he picked up dead animals along the road. I reported the incident to DGP Dick Ruths, because the house was in his district. When Dick checked the house, all he found were two hamsters. — DGP G. J. Martin, Spring Grove.

## Year Round Use

When we cleaned and inspected our wood duck nesting boxes last January, we were pleased to find that about 75 percent had been used the previous summer. We also learned six of the boxes were being used as wintertime quarters by screech owls. Of course this was a pleasant discovery, except it demonstrates the acute need for natural cavities. — LM William J. Lockett, Perkasio.

## Drowned

A year ago I was inspecting SGL 134 and found our resident beavers had discovered how to plug our beaver-proof control box, making the pond's water level rise excessively. The crew unplugged the pipes and repaired the structures, and the water level dropped to its normal level. Then in January when the ice froze solid, the crew visited the wood duck boxes at the pond to replace the wood shavings in the nests, and discovered that eight had eggs in them. Apparently, when the beavers plugged our control device the water level came up over the eggs and prevented hatching. — LMO Ken Zinn, Jersey Shore.



## Fast Action

Just one day after the Beaver County Food and Cover crew completed some border cutting on Farm Game cooperator Glen Wayoner's farm, Glen called to report he had just seen 17 deer feeding along the newly created edge. — LMO R. B. Belding, Waynesburg.

## Reminders

**SOMERSET COUNTY**—While out looking for turkey flocks, I was thrilled to find one containing 60 to 70 turkeys. I found these birds in an area where I have trapped a few turkeys in each of the last three years — where several local hunters have told me none were left because I trapped them all. — DGP Daniel W. Jenkins, Somerset.

## Getting Youngsters Involved

**SNYDER COUNTY**—When the Richfield Sportsmen Club holds its monthly meetings, several members schedule a program for the members' children. At such a meeting I attended during the winter, the "junior members" built wooden bird feeders while their parents had their meeting. This club should be commended for making a sportsmen's meeting a productive family affair. — DGP John Roller, Beavertown.

## Not My Fido

**ERIE COUNTY**—Because of the deep crusted snow we had in February, an unusually large number of deer were killed by free roaming dogs. Many of the owners were identified and ended up paying large fines. Despite all the publicity we give this problem, pet owners invariably refuse to think their dogs are capable of such acts until they see the evidence. —DGP Wayne Lugaila, Waterford.



## Early Birds

**TIOGA COUNTY**—On the foggy evening of February 9, Ed Bellinger called me to say he had just seen a flock of geese flying over at treetop level. I asked him if he was sipping some “geese brew,” as it was very early in the season to see geese flying. He assured me that his wife had not concocted him any brew. —DGP John Snyder, Wellsboro.

## Expensive

**ADAMS COUNTY**—Deputies Curtis Shilling and Alford Shull and I recently arrested four individuals for possessing and transporting two deer in closed season. There was approximately 56 pounds of boned-out venison from the two deer. Fines involved totaled \$1600, which figures out to \$28.57 per pound, not counting the firearms and spotlight we confiscated. —DGP Gary Becker, Aspers.

## Pleasant Interruptions

**BRADFORD COUNTY**—Phone calls at 7 o'clock Sunday mornings are never welcome, but one recently started me off on what turned out to be a pretty nice day. This particular call was about a river otter on a pond adjacent to Route 706 near Stevensville. On my way to see the otter I had to stop on Route 409 to let a gobbler and six hens cross the road. When I arrived at the pond I found the otter floating around, showing off for the many spectators that had already heard about this rare visitor. From there I picked up two road-killed deer, and as I was going to dispose of them I was stopped again by a gobbler crossing the road. —DGP Edward N. Gallew, Wyalusing.

## Just Huntin'

**POTTER COUNTY**—Biologist Arnie Hayden and I were sitting in a tent waiting for some turkeys to enter our trap and enjoying the many songbirds feeding on the multiflora rose bushes. Suddenly they disappeared. Looking around we spotted a sharp-shinned hawk winging along the rose bushes, looking for a songbird meal. So far as we could tell, he wasn't successful, and the birds quickly returned to serenade us. —DGP Ron Clouser, Galeton.

## Pass It On

**NORTHUMBERLAND COUNTY**—Once again it's time to remind people to leave wildlife alone. Among other things, those picking up or possessing so-called orphaned wildlife are subject to stiff fines and the loss of hunting and trapping privileges. Wildlife babies are rarely abandoned; the problem is, they often appear to be. If you come across a young animal, leave it alone. And, to go one step further, pass this piece of wisdom along to those who do not get **GAME NEWS**. —DGP James M. Kazakavage, Sunbury.





### Still a Bargain

**MIFFLIN COUNTY**—While working at Harrisburg's Eastern Outdoor Sport Show, I was pleasantly surprised to hear many favorable comments concerning the proposed license increases. Occasionally, however, somebody would express their dissatisfaction about having to pay \$15 for a year's worth of hunting. But they invariably fell silent when it was pointed out they had just paid \$5 to enter the show, which entitled them to walk around on concrete for a couple of hours. —DGP Timothy Marks, Milroy.

### He Sure Did

**BRADFORD COUNTY**—Last fall, after Larry Murray and his fellow teachers at the Athens School had discussed the cost of hunting, he decided to keep a record of his costs. Larry purchased a regular hunting license, a bear license, archery stamp, and muzzle-loader stamp for a total of \$20.50. He logged 198½ hours of what he calls pure enjoyment in the field, which amounted to approximately 10 cents per hour with, at the time, spring turkey season yet to come. Larry bagged a red fox, four raccoons, a deer, turkey and two rabbits. The pelts brought him \$86 and the meat from the game was a welcome addition to his table. Larry feels he certainly got his money's worth. —DGP A. Dean Rockwell, Sayre.

### All 3000?

**ADAMS COUNTY**—I recently learned from the Game Commission's slide program concerning the proposed hunting license increase, that the agency sends out about 3000 pieces of mail each month. Judging from the way my desk looks, I believe all that mail is sent to me. —DGP Larry Haynes, Gettysburg.

### Poor Choice

**CLEARFIELD COUNTY**—I recently was called to a home where a young man had been bitten by a rabid raccoon. As you may already have guessed, the raccoon was being kept in a cage in the backyard. No one knows where it contracted this disease; nevertheless, everybody in the family who had come into contact with the raccoon had to receive a series of shots. Removing a wild animal from its natural environment to keep it as a pet is illegal, seems immoral, and as this family now knows, is just not worth the risk. —DGP Jim Neely, Penfield.



### Enjoying the Weather

**LYCOMING COUNTY**—I think the fairly mild winter caused some male bears to remain active instead of denning up. From December through February, I was getting a bear report or two a month from snowmobilers and cross-country skiers. —DGP Dan Marks, Proctor.



### Sure You Will

**FOREST COUNTY**—The mild winter should have been easy on wildlife. During my travels I've seen a lot of good looking deer, but I'm having a difficult time finding turkeys. I'm not concerned, though, because I had the same problem last year until mid summer when the birds started to appear in good numbers throughout the district. I hope we find it the same this year. —DGP A. Pedder, Marienville.

### In the Trenches

**FULTON COUNTY**—While on our way to trap turkeys, DGP Dave Koppenhaver and I went to make a turn into DGP Frank Clark's driveway, but ended up in a ditch. Things looked bad until Frank showed up and the three of us got the car out. For our time and activity reports that day, we coded our time to "culvert operations." —DGP Mark Crowder, McConnellsburg.

### New Quarters

**CENTRE COUNTY**—This past February the Bald Eagle 4-H Club erected 13 wood duck nesting boxes on Black Moshannon Lake. The kids constructed the boxes themselves from plans furnished by the Game Commission. Each of us who participated in the project had an enjoyable and rewarding experience, and we're now hoping the wood ducks enjoy using them. —DGP Jack Weaver, Bellefonte.

### A Fan

While traveling on Route 422 near Womelsdorf I came upon a three-vehicle accident. Neither the State Police nor emergency crews had arrived, so I stopped and rendered assistance, checking for serious injuries, taking precautionary measures against fires, and organizing traffic routing. During the confusion, an unidentified woman said she would like to talk to me later. After the emergency crews arrived and took over, she came over to me again and said she just wanted to extend congratulations to the Pennsylvania Game Commission on their programs, especially with the turkey and deer. —FAS Perry A. Hilbert, Reading.

### Busy Time

On a frigid day in February, I noticed a chipmunk darting from shrub to shrub around my house. A few days later I saw mouse tracks in the snow leading to and from my garage. Anxious to nip this problem in the bud, I set a multiple-capture live trap and quickly caught two white-footed mice. When I emptied the trap I was surprised to find a shrew had also stumbled into it. It had killed both mice and partly consumed one by the time I arrived. —LM Stephen L. Opet, Tamaqua.

### Improving

**POTTER COUNTY**—It's strange how quickly people forget things once they are no longer as obvious or visible as they used to be—such as a browse line in the big timber country here. —DGP Ed Clark, Austin.

### More Will Move In

**CRAWFORD COUNTY**—Last month I reported on the first coyote sighting on the Pymatuning Refuge. This month, I'm sorry to report, we picked up the first roadkilled coyote in the area. —DGP Dave Myers, Linesville.



# 1984 Wildlife Conservation Awards



**Joe Leazier**  
Somerset Co. Area Vo-Tech



**Dennis Coble**  
Clearfield Area HS



**Brett Long**  
Clearfield Area HS

**J**OE LEAZIER of RD 3, Berlin, was the first-place winner of the 1984 FFA Wildlife Habitat Development contest. Joe, who attends the Somerset County Area Vocational Technical School, took second place in this contest last year.

Dennis Coble, a senior at Clearfield Area High School, was the second-place winner. Third place went to Brett Long of Penfield, also a senior at Clearfield Area High School.

## Projects

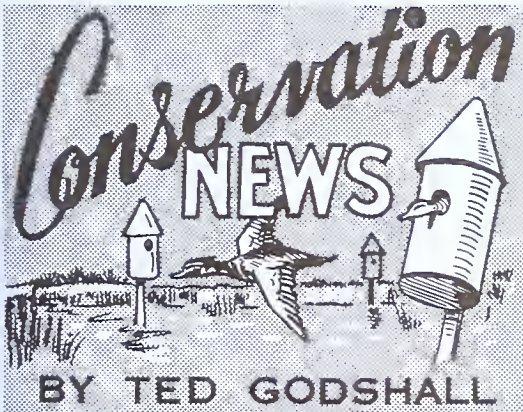
Leazier's projects included tree planting, wildlife observation, construction of nesting structures and brushpiles, bridges, reflector dams and jack dams to improve stream-related habitat; he

erected squirrel nesting boxes and constructed bird feeders, created a stream improvement program for fish, and carried out a winter feeding program.

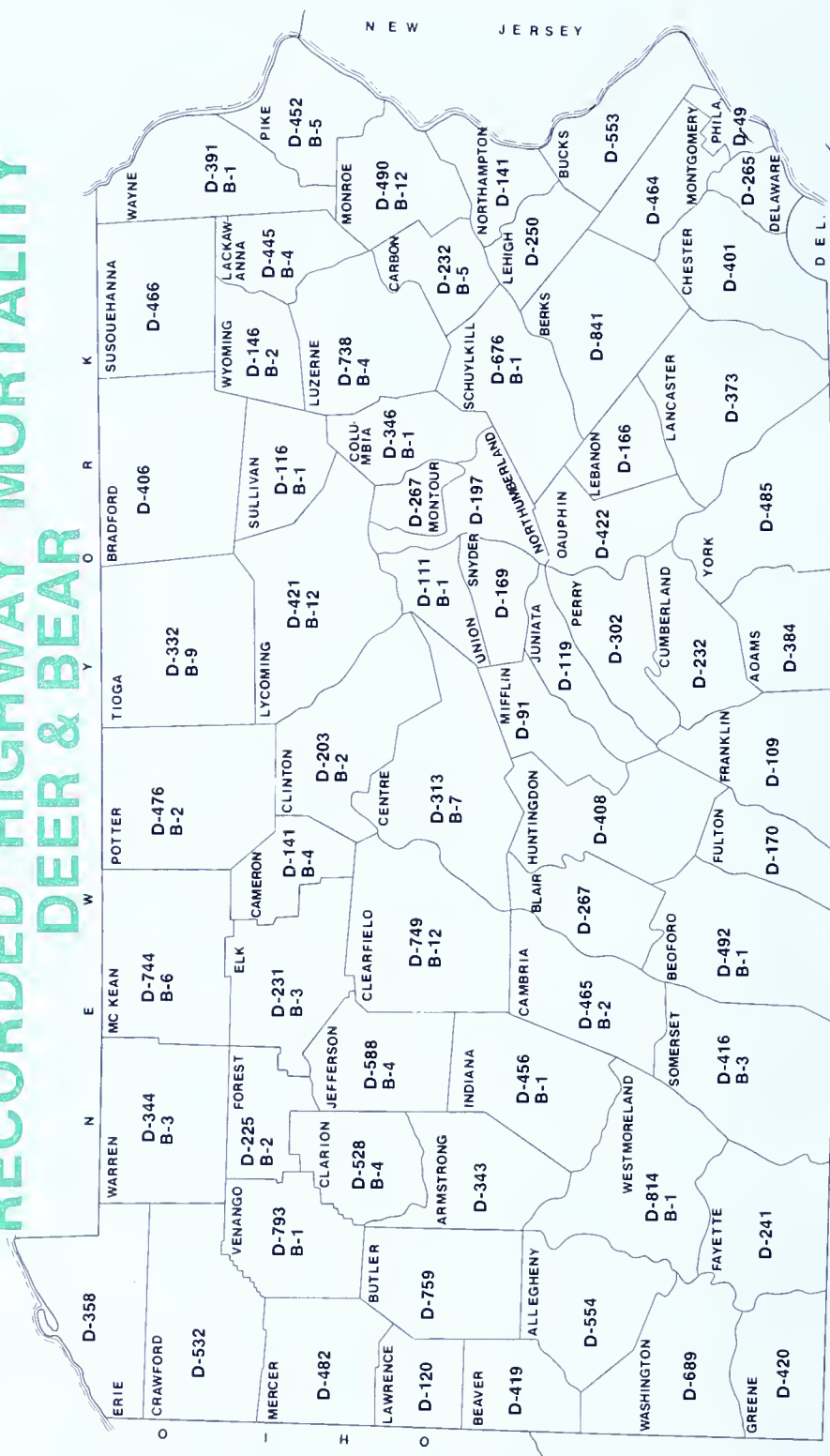
Leazier is president of his chapter and secretary of the Somerset County FFA Association, and a member of the National Honor Society, A.Y.S.O., and the Soccer Club. He is active in the B.O.A.C., and has received a gold placing in the Creed Speaking contest and the Star Greenhand Award. He plans to study agriculture at Penn State.

## PGC and PDE Co-Sponsors

The Pennsylvania Game Commission and the Pennsylvania Department of Education co-sponsor this competition. It is open to any vocational-agricultural student in the state. Students set up work plans in conservation, land management, marsh and stream development, firearms safety, etc. These plans must be approved by the student's Vo-Ag area advisor and teacher and the local game protector. Game Commission representatives and Department of Education personnel inspect the projects. Judging is based on the quality of work completed, and may include comparing the area with photos taken before work started. Prize money of \$1000 is divided among the winners.



# 1984 RECORDED HIGHWAY MORTALITY DEER & BEAR



DEER (SYMBOL-D)		BEAR (SYMBOL-B)	
HIGHWAY	25,788		116
ILLEGALS	3,860		29
CROP DAMAGE	1,276		40
DOGS	540		0
OTHER	861		21
TOTAL DEER MORTALITY		32,325	
TOTAL BEAR MORTALITY		206	



## Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Douth, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

### Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER PATCH .....	\$ 3.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

### Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

### Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 by Ned Smith) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

### SPORT Items

_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

### GAME NEWS

_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 3.50
-------	--	---------

### Waterfowl Management Stamps (Voluntary)

_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

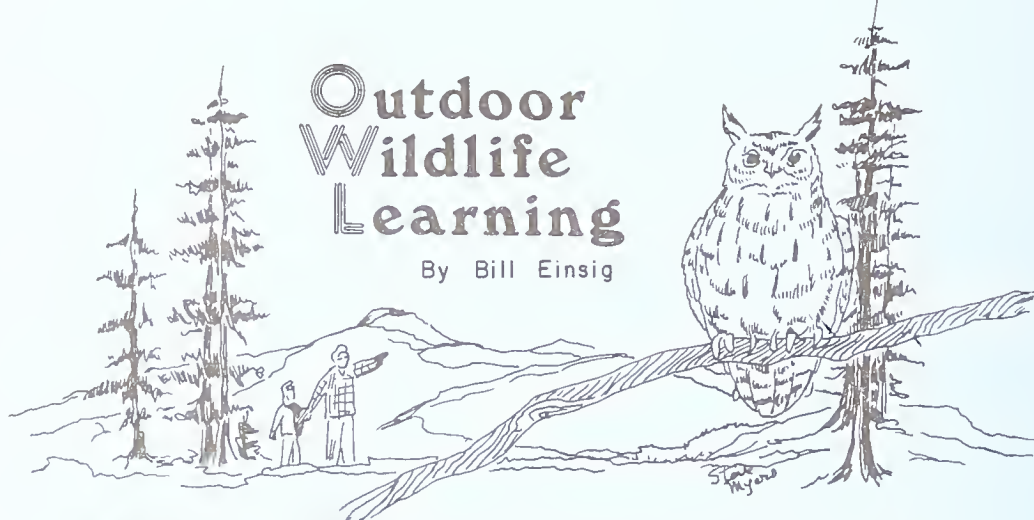
Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

DO NOT SEND CASH

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



## PACS—For Wildlife and Habitat

During the past several years, a variety of high quality educational materials have been produced for teachers interested in working with wildlife in their classrooms. Project Wild is a good example of such a collection of activities that help youngsters learn about wild creatures and their need for management. However, other sources shouldn't be overlooked.

One of the newest is a series of packets developed by the U.S. Fish and Wildlife Service and produced by the National Institute for Urban Wildlife. Some of these packets deal with critical habitats such as marshes, urban areas and beaches. These are called Habitat Pacs. Issue Pacs, on the other hand, deal with more general topics such as endangered species, migration and wildlife conflicts, among others.

Each Pac contains an 18 x 24-inch poster. The front side is four color art while the reverse holds information useful to that particular topic. There are three lesson plans per packet and blackline masters for student data sheets. The developers also include an overview of the topic at hand to help improve the teacher's background before the lesson is taught.

My favorite part of each packet, however, is a sheet called the Student Page. This might contain a game, puzzle or other diversion intended to be just learning fun for the student to do on his own. The Student Page in the Hunting and Wildlife Management packet offers a recipe for braised rabbit and directions for making a papier-mâché duck decoy. It's refreshing to see the authors know students are also kids who need time to do things for the fun of it.

Some activities in each packet are intended for outdoor use, while others can be done in the classroom. One activity in the Wildlife Management packet uses a running game to illustrate the Lincoln-Peterson mark-recapture technique. About half of the student group plays the role of marked geese. All geese, marked and unmarked, then migrate from one end to the other of a rectangular game field while several hunters try to harvest them by tagging. Some of the harvested geese are marked; others are not. The data sheet helps each student calculate a population estimate based on the ratio of marked to unmarked harvested geese. None of the math is difficult and the authors have used icons to help the student get the right numbers in the right places.

The marking of these geese consists of giving the student a band bearing information on the species, age, sex, date, and place of banding. After the game is played to collect data for the population estimate, the bands are analyzed. Students learn by comparing dates and locations that most birds winter on the Gulf Coast and nest in Canada.

Another activity in this packet is a familiar one from Project Wild. Again, students role play. This time half the group is deer while the other half represents habitat factors such as food, water or shelter. The groups line up some distance apart and turn their backs to each other. The deer decide which of the three factors (food, water, shelter) they are going to pursue, and students in the other group decide which of those factors they will represent. On a given signal, the groups turn and the deer rush to cap-



ture the factor they need to survive.

Up to this point, the activity is identical to Oh Deer! in Project Wild. However, now predators get involved. Two students play the part of mountain lions and roam the area between the groups. As the deer try to capture their basic survival needs, lions capture deer. It may sound confusing but it's an easy game that kids love to play. The data it generates are useful in graphing the dynamic balance of natural populations.

Still another activity I'm anxious to try comes from the packet on Migratory Birds. In this lesson students are given a map of North America and randomly select from 50 banding reports. They then plot the date and location of each band recovery. Eventually, after enough bits of information have been plotted, the maps show the wintering areas, the nesting areas, and the major migratory routes through the United States.

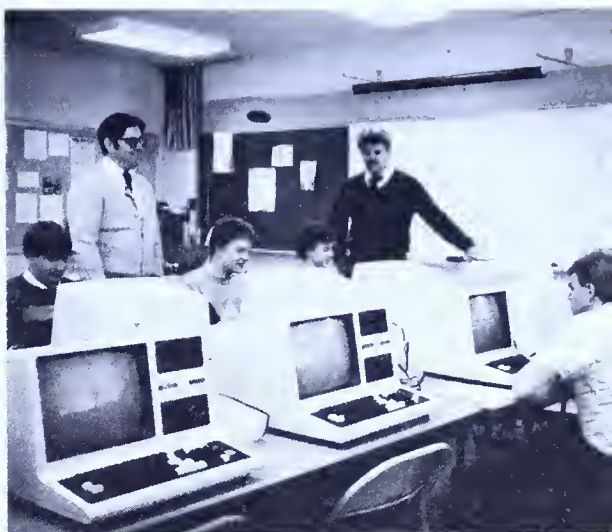
Materials in the packets are well done and I get the feeling that the authors have had practical experience actually working with kids. A few details are either missing or in error, but overall these packets are the best I've seen developed by a government agency at the federal level.

The packets are available from the National Institute for Urban Wildlife, 10921 Trotting Ridge Way, Columbia, MD 21044. Packets are sold individually and are priced at \$5 each according to an older price list I have. Some of the newer titles don't appear on my price list so there may be other changes in both titles available and their cost. Write to the Institute for current information before ordering.

## Antlerless Allocations by Computer

Ted Godshall's fine article, "Deer Populations and Antlerless Licenses" (GAME NEWS, November, '84), brought the complicated process of determining deer harvest limits to any of us who can handle a bit of arithmetic. Still, working with three- and four-digit decimal figures can become tedious. That process has now been written as a computer program for the environmental science class at Hanover High School.

John Timchek, the teacher of the class, said the program was an outgrowth of a lesson on carrying capacity. DGP John Martin was asked to visit the class to



**YOUNGSTERS** in John Timchek's environmental science class at Hanover High School use computer to work out antlerless license allocations. Program is available to others; see last paragraph of article.

answer questions about the Pennsylvania deer herd and the carrying capacity of forest types. The information Martin brought to the class helped the students understand how license quotas were established, and the idea of a computer program to speed calculations for any county in the state was born.

The program, written by Clyde Spangler and Gregg Boehne, who are also on the school staff, is based on a series of calculations similar to that given in Godshall's article. All that's needed is the Rate File Data from the most recent year. That data file for 1983 was published with Godshall's report.

The program is menu driven and easy to use. Simply feed it the right numbers and it will feed you the right answers. It allows you to save the results as a file on disk and to print the results. The program runs on a TRS80, Model III or IV, with at least one disk drive. Depending on the kind of printer you have, you may have to change some printer control codes and, if you have another microcomputer system, you may have to rewrite somewhat to make the coding run with your hardware.

Timchek will copy the program at no charge if he receives a blank disk and a postage-paid, self-addressed mailer. For more information, contact John Timchek, Hanover High School, 401 Moul Avenue, Hanover, PA 17331.

# Always a First Time

IN EVERY hunter's life there's a first time. The wonder in mine is that there was a second. The first time I fired a gun was sixteen years ago, at the insistence of my future husband. After that initial experience, I'm surprised I went on to become a hunter and shooter, much less marry him. But, in charity, it wasn't all his fault.

To please my then-boyfriend, I'd said, "Sure, I'll go hunting with you this fall." That was me talking, the gal from just outside the Big Apple, the one who'd never touched a gun in her life. I didn't think much about the promise until the day he loaded guns, ammunition and other paraphernalia into the car and announced we were going to do some shooting with the deer rifles.

At a local range he laid all the gear on a shooting bench, ordering me to stay away from them. No doubt he was trying to impress me with the danger that could come from mishandling firearms. I'd listened to a lecture on safe gun use during the drive, and the extra warning only made me more apprehensive. There'd been enough talk about guns "barking" and "thundering" and "kicking" to frighten me.

But I walked hand-in-hand with him to the backstop where we tacked up paper targets. When we returned to the shooting line, my boyfriend told me, "Stand well clear and I'll fire a few rounds to make sure the guns are sighted in." That day, from laziness or forgetfulness, we didn't have ear protectors with us and he never warned me to cover my ears.

When the rifle roared, the blast assaulted me doubly, intensified by the roof over the shooting line. It sounded like a thunderclap, and the recoil rocked my boyfriend back in his seat. I wasn't prepared for that at all. Turning to grin at me, he said, "Okay, now you try it."

I sat down at the bench, trembling inwardly but not wanting to disappoint him by showing my nervousness.

"Shoot the 30-30," he said, "then you can try the big gun, the 280. If you can shoot that, you can shoot anything."

Just what I needed to hear!

As I settled the stock against my shoulder, squinting through the sights at the wavering black dot, I heard him add, "Now hold on tight, or the recoil will hit you good." At that point I just closed my eyes and pulled. "KA-POW!" The blast crashed in my ears and the gun jerked back to hammer my arm. When I turned to my boyfriend, he was blurry. My eyes had filled with tears and I realized I was crying.

By then he was hurrying to me, face full of concern, "Put the gun down, gently," he said. "Are you hurt, are you okay?"

"I'm all right," I said, between sobs, "I'm just scared. Don't make me shoot again, and I'm *never* going to shoot that 280."

Well, I did shoot again, including the 280 and a whole list of other gun numbers that mean rifles, pistols and shotguns. Today I'm an avid hunter and hunter education instructor. But all that came in its own time. Actually, both of us were to blame for my first bad experience with firearms. He had grown up with guns and hunting and didn't realize how completely ignorant I was about them. And I hadn't told him — through pride, embarrassment, whatever — that I was worried and needed

## Another View...

by Linda Steiner



more explanation and assurance before I was ready to shoot.

In my case, a wrong-footed first step into the shooting sports didn't discourage me. But too often it makes a quick end to hopes of having a future of shooting and hunting companionship with a relative, spouse, child or friend.

To many beginners, how a gun operates is a total mystery. I know it was for me and, because I didn't ask, it was some time before I fully understood how pulling a trigger makes a bullet fly out the barrel. Where there's the unknown, there's room for fear, quite a different thing from the respect that firearms are always due. The very best place to get basic gun training is through a course at a shooting range or gun club, especially those with PGC- or NRA-affiliated programs. Like teaching a spouse to drive, giving the better half shooting instruction isn't the quickest way to domestic harmony.

### Confidence

Once I understood how a gun works and became familiar with the mechanical parts, I found I enjoyed cleaning firearms after a day's shooting, much to the delight of my companions. Handling the guns, working actions and removing shotgun barrels for brushing gave me a confidence with them I should have had the first day.

The second mistake of my shooting initiation was that I fired the wrong gun. Experienced shooters don't mind the rather rough nature of large calibers, because they expect it. But how much more pleasant for the new shooter to start with a mild-mannered 22! I wasn't enthusiastic about rifles until I acquired a 22 Magnum bolt action. It was a light caliber version of my deer gun. Shooting the rimfire on the range and at squirrels all fall, I was a lot more at home with the big gun in deer season.

The light report and imperceptible kick of the 22 have a way of inviting "tag-alongs" to the range to try shooting for themselves. When they're ready, they'll work up to the bigger calibers.



**STUDENT** receives instruction from Dr. Pat Damico, Hazleton, on handling 45 ACP. Proper training gives a good beginning in the shooting sports.

Of course, ear and eye protection always make the experience more pleasant, as well as safer.

The great shooting legends, like Annie Oakley, have made it tough on the rest of us. Very few people are natural marksmen and no one is born knowing how to operate a gun. Like learning to play piano, knit a sweater or tie a trout fly, the shooting sports must be learned from square one. If you're a novice, admit that to yourself and don't be afraid to ask questions, even if they seem to be dumb. I missed the first deer I shot at because the borrowed rifle was sighted-in for a "real fine bead." I didn't ask what that meant, and when I saw the spike I laid the front sight in the back buckhorn like a full moon. I'm not sure where the bullet went, but it didn't connect. On the flip side, if you're in the teaching role, don't hesitate to explain every detail of gun operation, shooting and safety procedures and range etiquette, no matter how trivial or obvious you think they are.

It's better to hunt with a borrowed gun than stay home, but my enthusiasm increased dramatically when I was able to have a gun of my own, of my own choosing. That purchase meant making

a commitment to the sport and gave me a shot of self-confidence. Having a firearm with which I was completely comfortable made all the difference in the field.

For a youngster or woman especially, most borrowed guns don't fit. They are usually the property of large-framed men. I began small game hunting with a loaned double-barrel 12-gauge. It was too big and heavy for me to shoulder

in time to shoot at anything moving. I made do because it was the only shotgun available to me, and managed to take a few squirrels. But I enjoy wing-shooting far more since I bought a short-stocked, lightweight autoloader. Carrying and shooting it is a pleasure, not a chore. If the budget can stand it, a new gun for a new shooter says, "I believe in you. Welcome to the ranks . . . and to the future."

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**How I Photograph Wildlife and Nature**, by Leonard Lee Rue III, RD 3, Box 31, Blairstown, NJ 07825, 287 pp., \$21.45, delivered. Lenny Lee Rue is undoubtedly the most renowned wildlife photographer and he's also a highly respected author and lecturer. With this outstanding book he has combined these talents into one of the most useful publications in the outdoor field. The 300 photographs used here also make it one of the most pleasing. Rue knows the business and he knows how to help amateurs and professionals take better outdoor photographs. Initial chapters cover basics and equipment. Following chapters delve into specific kinds of outdoor photography, from scenes and wildflowers to birds and mammals (his favorite). A final chapter covers selling photographs. How-to books are published every day, but ones as useful as this by such an authoritative and widely recognized professional are few and far between.

**Hounds and Terriers**, by Ronald Delaney, Sterling Publishing Co., Inc., Two Park Ave., NYC 10016, 128 pp., \$9.95. All 50 breeds of hounds and terriers are completely described, including a history of each breed, its morphological characteristics, hunting styles, suitability as house pets and more. A good reference for both hunters and pet fanciers.

**A Guide to Wildlife Viewing in Alaska**, Alaska Department of Fish and Game, P.O. Box 3-2000, Juneau, AK 99802, 170 pp., softbound, \$12.95. This high quality guide, produced by Alaska's Nongame Wildlife Program, is for the increasing numbers of residents and tourists who want to know where and when to find wildlife in that state. The bird and mammal species found in fourteen habitat types are described. The guide also covers areas of particular wildlife significance—refuges and parks. The complete coverage and excellent color photographs throughout will appeal to those planning a trip to our 49th state, and to those who can only sit back and dream.

**The Federal Duck Stamps: A Complete Guide**, by David P. McBride, New Century Publishers, Inc., 220 Old New Brunswick Rd., Piscataway, NJ 08854, 206 pp., \$34.95. For years to come, wildlife stamp collectors and enthusiasts will consider this the authoritative guide to the Federal Migratory Bird Hunting Stamp program. After introductory chapters on the stamp act and its purpose, the duck stamp contest—the most prestigious art contest in the world—and the marketing of duck stamp prints, each of the 50 stamps issued since the program began in 1934 is described. Every pertinent detail about the artist, his art, and related stamp information is covered.

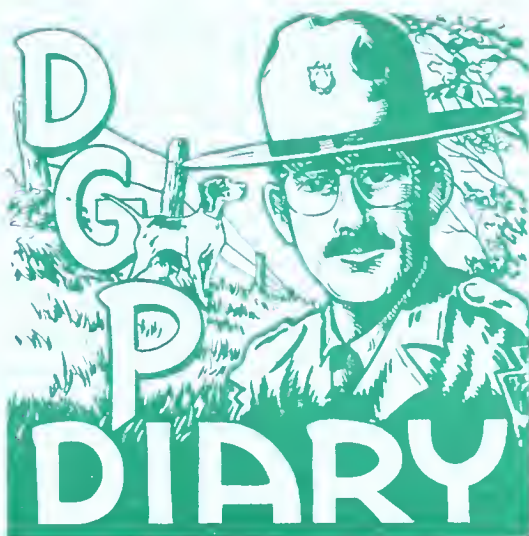


**J**UNE is the month when summer officially begins. Summer in the north-central mountains is late to arrive and all too brief, but most welcome and enjoyable. It is a time when game protectors can officially trade in their coats and don the summer uniform and short sleeve shirts. The deer and elk, being more naturally adapted, also exchange their grayish winter hair for the sleek reddish-brown summer pelage.

Young wildlife is in abundance everywhere and populations of many game species peak this month. For instance, Cameron County may see a deer herd of approximately 11,000 whitetails now when food is plentiful. That is some 4,000 more than our range can optimally support over the winter, though, and our controlled harvest in the fall will bring the number back into line before the snows build up and the mercury falls. Part of my job in the months to come will be to protect this surplus wildlife so it can be legally harvested by sportsmen in the fall and not wasted or taken unlawfully by those who would cheat on the system.

*June 3*—This is the day our deputy trainees have looked forward to for nearly a year. Today they become fully commissioned state officers, deputy game protectors. We have three such fledgling conservation officers going on the Cameron County roster this year. Deputy John Schatz accompanies me as we drop the new officers off at the Northcentral Region Office for an all day orientation and training program. Training is certainly no new experience for the men from Cameron County. We have been working with them for months on all forms of law enforcement and wildlife management techniques. They will spend the next year working closely with seasoned officers such as John, Bill Olivett, or myself. The following year each will be issued a uniform and will probably have a younger officer riding with him to learn the ropes. That's not much time to learn, but the men are intelligent, eager, and dedicated. As I look back to 1972 when I was commissioned as a deputy, I realize how much more they have to learn—and that some things just can't be taught in a classroom. We learn by doing and we never stop learning.

After dropping off the new officers, John and I continue on to the Loyalsock Game Farm. There we meet with Superintendent



**By Joe Carlos**

**District Game Protector  
Cameron County**

Banks Smith, who gives John a conducted tour of the facility. Banks and I go back a long way. When I was a forestry student at Penn State I spent my summers raising ringnecked pheasants at the Southwest Game Farm. Banks was assistant superintendent there, and he and I became friends. After I completed school I was able to go on full time as a propagator, and eventually Banks was promoted to the position he holds now. Later I entered the Game Commission Training School. We have kept in touch and remained friends, and I look forward to the annual reunion. Moreover, it gives the deputies a chance to see a side of the Game Commission they might otherwise never be exposed to, and helps round out their appreciation for our total effort. It's a day well spent as the game farms are modernizing some of their rearing practices to produce a wilder and more hardy pheasant. John is given some insights that will help him in his sportsmen and landowner contacts.

*June 5*—I am working on a newspaper article for the Cameron County Echo today. The piece shows how the habitat in our area has slowly changed since the last major logging era around the turn of the century. The size and quality of the white-tail deer herd is inseparably tied to that habitat. These changes have developed so slowly that people who have lived or owned hunting camps in the northcentral mountains haven't recognized them. Un-

# KILLING EAGLES IS UNLAWFUL!

Mature Bald Eagle

Immature Bald Eagle



Up To  
**\$4,000 REWARD**

for information

leading to the CONVICTION of individuals who MOLEST,  
INJURE, or KILL BALD or GOLDEN EAGLES.

Report violations to your LOCAL GAME PROTECTOR.

REWARD PROVIDED BY

PAID BY THE PENNSYLVANIA GAME COMMISSION, AN AGENCY OF THE PENNSYLVANIA DEPARTMENT OF REVENUE.  
NAMES OF VIOLENT OFFENDERS WILL BE FORWARDED TO THE FBI FOR PROSECUTION. NO COMPENSATION FOR INFORMATION.  
FOR MORE INFORMATION, CONTACT: PA GAME COMMISSION, 300 N. MOUNTAIN DRIVE, HARRISBURG, PA 17104.

fortunately, with an abundance of pole-timber, the ability of most of the traditional northcentral deer counties to support large deer herds has declined. Many hunters have had difficulty adjusting to this fact and still leave their homes in southern Pennsylvania where the deer herd has improved in recent years to make the annual trek to the "big woods."

*June 8*—I am due to get a new vehicle in a few days and am meeting with radio technician John Haskins who is removing my two-way police band radio and red light from my old vehicle.

*June 11*—We are holding a statewide firearms instructors workshop today at Scotia Range in Centre County. All of the Game Commission's instructors are certified by the National Rifle Association. We discuss recent changes in our firearms training and policy.

*June 13*—The entire day is spent exchanging vehicles. I drive my old vehicle to the commonwealth garage in Harrisburg where it is turned in and will later be sold at a public auction. I pick up a new Bronco II.

*June 14*—Most of this day is spent getting my new vehicle ready, including

mounting the deer rack. Some 20 percent of my time is spent on such miscellaneous activities.

*June 18*—The day is spent finishing the newspaper article and repairing our bear trap. From the first of March right up until bear season, that trap is in constant demand. We can't afford to have it inoperable for even a day. I could probably use a half-dozen such traps but at about \$2,000 each we have to make do with just the one. We carefully prioritize its use, giving first consideration to public safety, followed by genuine crop and property damage, with nuisance complaints such as tearing up garbage seldom able to receive our attention.

Repairs on the bear trap are only a few hours old when I receive a rather unusual request from First Fork resident Clayton Schlemm. The Schlemms feed wildlife year around—deer in the winter and at this time of the year a rather large family of raccoons. They have been putting out dry dog food for the coons in the evenings, storing the surplus under their porch deck. The last several nights something has been raiding their cache and it isn't difficult to deduce what animal might devour whole bags of dog food in one sitting! Since there are no other requests for the trap, I agree to put it in their yard, and spend the next three hours on that project.

*June 19*—The Northcentral Region firearms instructors are having a followup meeting at the office to discuss how to implement the new policy and establish a training schedule for the approximately 187 salaried officers and deputies in our region.

*June 20*—John Haskins is installing my radio in the new Bronco and giving my base radio a much needed tune-up. The Game Commission does not provide radios for in our homes, but many of us purchase and maintain our own. This greatly adds to our efficiency and makes it easy for deputies to contact us when we are cooped up in the office doing paperwork. I also maintain a radio in my personal vehicle and an additional county control radio in the Bronco. Radio communications in mountainous Cameron County are probably the most difficult in the entire state, yet because of the extensive rural areas are vital. The county control radio gives me 24-hour-a-day, 365-day-a-year contact with



other local law enforcement and emergency agencies, and is worth every penny spent to purchase and maintain it.

*June 22*—We have caught the bear at Mr. Schlemm's residence. It is a 138-pound male which Bureau of Forestry Foreman Charlie Baker and I process and relocate to Potato Creek, in McKean County.

The vast majority of our nuisance bears are males. In fact, we have had whole trapping seasons here in Cameron County where all the bruins captured were boars. The males of many species seem to be more curious, aggressive, and adventure-some than the females. We have noticed other behavioral differences between male and female black bears. For instance, the boars tend to remain active in the fall a little longer than females. Pregnant sows, especially, den up earlier. Were it not for the intensive bear research program conducted in recent years, we would never have learned these facts.

*June 23*—Most of the day is spent answering a beaver complaint. Beavers near

Truman have built a dam, flooding an access road to a small cemetery.

*June 28*—As a competitive handgun shooter, I have built on my property a moving target in order to practice for the Bianchi Cup, an international pistol tournament. The mover traverses a distance of fifty feet in just five seconds. Deputy John Schatz is in my advanced firearms training class, and is trying his hand at the moving target this morning. Like most shooters, John has found that maintaining sight alignment while carefully squeezing off a shot is challenging enough on a stationary target. When that silhouette is moving at ten feet per second and the shooter is trying to program in the proper lead for the distance involved, it can become downright mind boggling. Incidentally, this involves drawing and firing as many as six full-power rounds, all within that five-second run. With a few tips, John is getting an acceptable number of hits. Many of our deer hunters would profit from such an experience. Besides, as John found out, it is a lot of fun.

## Wildlife Photography Association

The Wildlife Photography Association is a new organization dedicated to the pursuit and capture of wildlife on film. Its main goal is to allow those interested in photographing wild plants and animals to communicate with each other. This is accomplished through a newsletter, "Wildlife Photography." The newsletter is not a "picture book." It is aimed at the exchange of practical information. For detailed information, contact Rich Faler, P.O. Box 691, Greenville, Pa. 16125. Phone 412-588-3492.

## NHF Day® September 28, 1985



To: National Hunting and Fishing Day®  
P.O. Box 1075 • Riverside, CT 06878

- ☐ I represent a club; please rush \_\_\_\_\_ "Complete Organization Packets" @ \$5.00
- ☐ I want to do my part; please rush \_\_\_\_\_ "One-on-One" Kits @ \$2.00

Enclosed is a check or money order for \$ \_\_\_\_\_

Name \_\_\_\_\_

Organization \_\_\_\_\_

Street Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

I WONDER if I could eat an orange with my hands tied behind my back. Birds are handicapped that way all the time. They don't necessarily have to peel oranges, but they must catch bugs or shatter seeds or crush shells or dismember carcasses or snare fish—all without the aid of hands, which they gave up some 150 million years ago in favor of wings. Instead, birds use their bills.

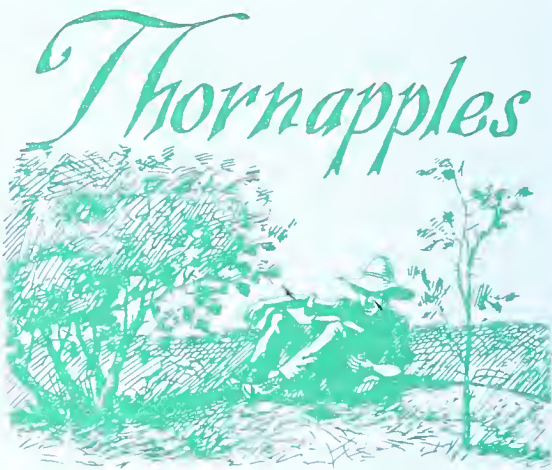
Bills are hardened skin laminated to bony outgrowths of the jaw; think of them as modified lips. Scientists say that bills are “plastic” in evolutionary terms, meaning they are molded quickly when a species must adapt to changes in climate, habitat, or food supply. For this reason they are almost useless for taxonomic classification. Ibises, spoonbills, and flamingos, for instance, have spears, spoons, and strainers, respectively, and yet they're close cousins.

Two species of birds that share the same environment—marshland, for instance, or forest—may possess bills having totally different shapes, so that each eats a different food and avoids competing with the other. Or, the bills might be shaped alike but be of different sizes, so that one bird tends to eat small flies while its neighbor gobbles up larger ones.



From pelicans to hummingbirds, birds' lives revolve around their bills. The bill of an unhatched chick has a temporary spur, an “egg tooth,” that chips the baby free from the shell. Birds use their bills to attack enemies, impress mates, build nests, preen plumage, and feed young. A bill's paramount function, though, is to feed its owner.

One evening, having dinner at a bay-side restaurant, I watched a skimmer



*Chuck Fergus*

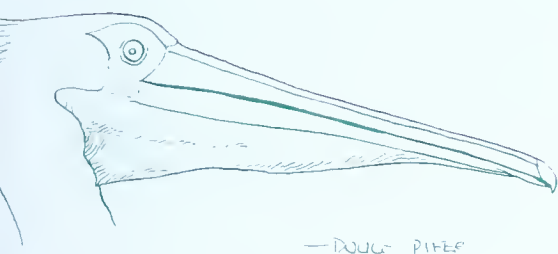
taking its meal. The bird was handsomely feathered in black and white, with a bill like two black-tipped red knives, the lower mandible jutting out farther than the upper. Back and forth across the bay flew the skimmer, with the tip of its lower mandible plowing through the water. When the bill struck a shrimp or a small fish, the upper mandible would clap down, and the bird would swallow its food without pausing in flight. Later, I learned that the skimmer's lower mandible—forever dragging through the water—grows faster than the upper to counteract wear caused by friction.

The turnstone also inhabits the ocean's edge. Its bill is slender and turns up at the tip like a pry bar. The bird uses it to flip over stones, shells, and bits of wood, uncovering shellfish, crustaceans, and worms. Turnstones often feed in the company of oystercatchers, who also have a distinctive bill: long, thin, and higher than it is broad. An oystercatcher stabs these surgical scissors into the partly opened shell of an oyster, paralyzing the occupant before it can snap its armor shut.

One of the queerest of bills belongs to the pelican. It looks like a length of broomstick with a down-curving hook on the end and a leathery pouch beneath. A pelican eats fish, and, as any grade-school child will tell you, its bill holds more than its belly can. The bird



dives or swims into a school of fish, and sweeps its bill up from below. The water's pressure expands the pouch, trapping the fish. The pelican tilts its head back and lets the water drain out; fish trying to exit from the front are turned back by the bill's hook. After the pelican swallows its meal, the empty pouch pleats itself into a compact ridge of skin below the bill. (Is the grade-school rhyme flawed? I've never seen a pelican spit out any fish.)



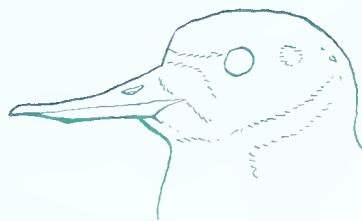
Curlews, sandpipers, snipes, and ibises frequent the ocean's edge and the tidal flats of bays and estuaries. Their bills are long forceps for withdrawing worms and crustaceans from sand or mud. In marshes, herons wade slowly or sit like statues, waiting to spear fish with their long, dagger-like bills. The bittern, a kind of heron, even uses its bill as camouflage: When danger threatens, the bird squats and pokes its bill straight up, and it looks uncannily like a reed or a blade of grass.

A bizarre but functional bill belongs to the flamingo, a long-necked tropical wading bird that occasionally ranges into Florida. The bill, huge, bends downward at 45 degrees about halfway along its length. The flamingo lowers its head and submerges its bill with the top of the upper mandible pointing down, placing the bill essentially upside-down in the water. The bird pulls in its



tongue, sucking water into the cavity between the upper and lower bill halves; then it extends the tongue, expelling the water. On its way out, the water filters through hairlike projections inside the bill, called lamellae, which trap microscopic plants and animals. Each time the bird retracts its tongue, hooks on the tongue scrape the lamellae clean, and the bird swallows the morsels even as more food-clouded water floods the bill cavity. From dawn to dusk, a flamingo can strain out food equalling 10 percent of its body weight.

A flamingo bill is adapted to a single strategy for obtaining food. A gull bill is not. If a gull bill were a pocketknife, it would have a red plastic handle with a white cross and seventeen different blades from papercutter to awl. This plain-looking bill—straight, of medium length, strong and sturdy but not overly heavy—can open up a dead dolphin, hammer through a crab's shell, snare a fish, catch a piece of bread, steal a fisherman's bait. . . . Such an all-



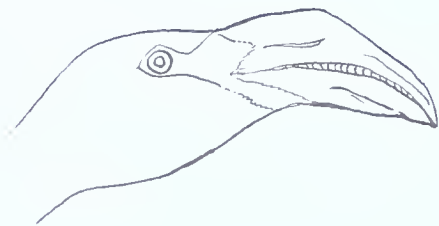
purpose tool is known as a generalized bill. Crows, ravens, jays, and starlings are other birds which have them. Nobody can say whether a generalized bill will stay the shape it is, or ultimately evolve into a specialized tool for performing one task superlatively to the detriment of others.

In the marshes live two birds which resemble each other closely, except for their bills. The Virginia rail has long legs, a chunky body, a stubby tail, and a long, slender, down-curved bill. The sora also has long legs, a chunky body, and a stubby tail, but its bill is short and stout, like a chicken's. The Virginia rail eats insects and other invertebrates (62

percent of its diet) and seeds (38 percent). The sora eats insects and invertebrates (27 percent) and seeds (73 percent). The birds coexist smoothly.

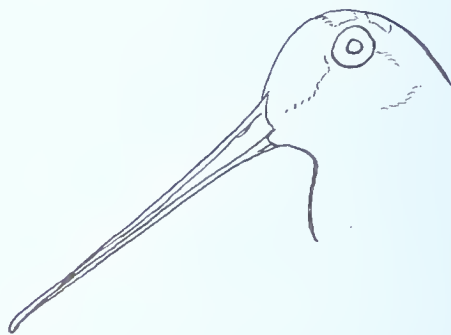


Ducks have a wide range of bills, all designed around seining, straining, or seizing food. The shoveler works like a squat, floating flamingo, swinging its spoon-shaped bill from side to side, opening and closing it rapidly. When the shoveler feels food, it clamps its mandibles shut and ejects the water through hundreds of tiny grooves—lamellae—which strain out items from algae to dragonfly nymphs. The merganser has a bill that is round when seen head-on; the mandibles have rows of serrations, like teeth, for gripping fish. These notches regain a reptilian feature that the ancestors of all birds lost over 100 million years ago.



In many species of ducks, the bill is hard at the tip, while its sides are soft and blunt, their margins richly supplied with touch-sensitive cells called tactile corpuscles. These cells feel out seeds, tubers, and insects in muddy water. A mallard has 27 tactile corpuscles per square millimeter of bill surface, compared to 23 per square millimeter in the most sensitive part of a person's index finger.

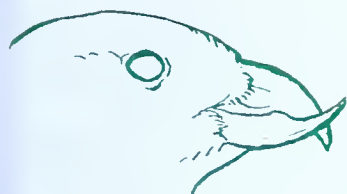
The woodcock's bill also has many touch corpuscles. The bill is pencil-thin, tapering, and looks half-again as long as its owner's body. The woodcock thrusts it into mucky ground, most of the way to the hilt. (The nostrils are up at the base of the bill, near the head, so the bird can breathe.) The bird shuffles its feet, blinks, and assumes the unfocused expression of a person trying to pick a BB out of a barrel of motor oil. Down in the muck, the bill is probing, feeling, trying to locate the movements of an earthworm. When it finds one, the bill—encased as it is in the soil—opens slightly at the very tip; the upper and lower mandibles close around the worm, minute ridges in their surfaces grip the slippery creature, and the woodcock sucks it up like spaghetti.



When hunting, I've bagged both a woodcock and a grouse in the same patch of brush, and the contrast between their bills is striking. The grouse's bill is short and curves downward. When I field-dress a grouse, the contents of its crop remind me that its rather nondescript bill is suited to picking up fallen leaves; nipping off buds; cropping green shoots; catching insects; and even accomodating small acorns for its strong gizzard to grind up later. Grouse, turkeys, quail, and pheasants have so-called grubbing bills, and all forage on the ground in the manner of chickens.

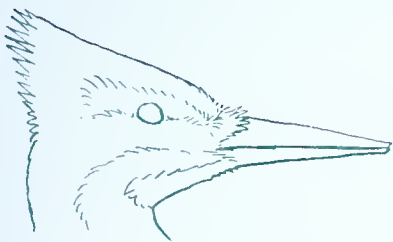
Once I watched a band of chickadees at a feeding station. A bird would pick





up a sunflower seed and carry it to a nearby perch, where it would hold the seed down with a foot, and tap repeatedly with its small, tapering bill to uncover the edible center. A cardinal dipped to the box, a flash of red. He perched on the lip and picked up seed after seed. The black hulls came floating down; the cardinal's bill, conical and stout, easily broke through to the meats. Cardinals, grosbeaks, and finches eat seeds, fruit pits, and nuts. The birds have strong, sharp-edged bills. In several species, the lower mandible has a hard projection toward the back of the jaw, against which a seed—held in place by a groove in the upper mandible—is rolled until the meat is sliced out of the hull.

Other birds solve the seed problem in slightly different ways. The crossbill works its twisted, overlapping mandibles between the scales of pine and spruce cones, levers the scales apart, and scoops out the seed with its tongue. The common grackle can pick up an acorn in its bill, rotate the nut between its mandibles, and saw the hull in half; a hidden lathe—a tough ridge on the



palate—accomplishes the cut. I've seen nuthatches wedge hard-shelled hickory nuts into crevices in the bark of a chestnut oak, and then chip through to the meat with blows from their straight, sharp bills.

I see a lot of bills on the wooded mountain where I live. A little mottled bird, the brown creeper, has one that is slender, curved slightly downward, and perhaps half an inch long—like a pair of tweezers. The creeper darts this instrument into nooks and crannies in tree bark, picking out spiders, insects, and insect eggs.



Then there are the woodpeckers. They have chisels for bills—flint-hard, heavy, and fused to a reinforced skull. In my woods, woodpeckers come in three sizes: small (downy woodpecker), medium (hairy woodpecker), and jumbo (pileated woodpecker). Often I hear the soft tapping of a downy or a hairy accompanying the staccato hammering of a pileated; the latter bird can cut through several inches of solid wood in minutes to uncover a borer, which it spikes on the end of a sharp-tipped tongue, withdraws, and swallows. The pileated woodpecker's most impressive billwork is the excavation, in a tree, of its nest cavity: up to seven inches across and two feet deep.

I see hummingbirds, tiny fliers whose bills are long and needle-like to siphon nectar from the deep throats of jewelweed, columbine, and other flowers. The whippoorwill has a trifling bill, little more than a rim around its broad, high mouth, through which nocturnal insects are funneled. By day, flycatchers—from the tiny wood pewee to the raucous great crested flycatcher—snap

up and crush insects in their flattened, notched bills.

One morning, I was startled by a soft, rising moan that sharpened to a scream, and died. I got my boots on and went out. In the early light, I found a pile of



intestines, the foreleg of an opossum, and a damp spot of white where a bird had voided. An owl. With a bill like a meathook for finishing off prey already wounded by its talons, and for tearing the carcass apart. Owls use their bills to wrench off heads, swallow them whole, and then rend the remainder into a minimum number of chunks for swallowing—an indelicate mode of dining made possible by a gaping mouth.

Bills. Meathooks, siphons, chisels, scissors, tweezers, forceps, fishnets, pry bars, strainers, knives (pocket variety, and dagger).

Recently, in Virginia's Chincoteague National Wildlife Refuge, I watched a snowy egret bent low over the water on the edge of a pond. He held his neck extended and his bill flat, kissing the surface. He shook his bill from side to side—a shimmer of ripples spread. Suddenly the egret picked off a fish and swallowed it, and just as quickly went back to vibrating his bill. I chalked up another use for a bird bill: fishing lure.

## The Wingless Crow

*The Wingless Crow* is a 200-page hardcover book made up of thirty-three of Chuck Fergus's "Thorn-apples" columns which have appeared in *GAME NEWS*. Wonderful reading for your own collection or as a gift. Order from the Game Commission, Dept. AR, Box 1567, Harrisburg, Pa. 17105-1567. \$10 delivered.



100-plus firearms confiscated by PGC officers for violations of the Game Law were sold at auction at the Middle Creek Wildlife Management Area last fall. Over 1500 persons attended the advertised event which brought in \$15,085. This was the first such public auction of confiscated guns. Formerly they were sold only to licensed gun dealers or registered dealers.

Photo by Metro Leshak



# Keep It Straight

By Keith C. Schuyler

Photos from the Author

**T**HERE IS A time-tattered expression as old as archery: "Straight as an arrow." Whether intended to describe the flight of an arrow or the finished product, the expression missed the mark.

If any early arrows were in fact perfectly straight, they were the happy outcome of tedious toil, wood from a tree that grew where there was no wind, and a lot of luck. Anyone who can spell the word *trajectory* knows that gravity starts to affect the flight of an arrow the instant it leaves the bow and while it is still undergoing lateral bending occasioned by ram pressure from the limb-powered string. So, an arrow never flies straight. Let's give those early folks the benefit of the doubt and assume they meant the arrow itself when they originated, "Straight as an arrow."

Technically, anything that is straight has exactly the same direction throughout, is not crooked, bent, bowed, wavy, or whatever. It is *straight*.

In ancient days, warriors frequently sent mass showers of arrows into ranks of the enemy in hopes some of them would score. Any deviation from perfect flight might as often flirt the arrow into an adversary as to miss him. Indians



**WAYNE COTNER** studies bend in aluminum arrow before beginning to work on it.

tried to get as close as possible to their planned meal or paleface land-grabber to negate to some extent the imperfections in their feathered missiles. When the horse became available, they employed this uncertain conveyance to close the distance to their targets even as their Asiatic predecessors had done.

Archers who struggled through pre-World War II days were happy to have an arrow shaft that was straight enough to find its way somewhere near the center of a target. Arrows were so imperfect that we numbered them according to the expected deviation from true flight. Number 1 might be expected to hit about four inches high to the left; number 2 could have a tendency to drift about six inches low to the right; and so on.

It was a long time before legislatures would permit the arrow's reutilization on the hunting scene. Not until the archer could prove he was more effec-

tive than the ancients did officialdom restore his privilege. But it was not because today's archer is any more skillful than his aboriginal and so-called civilized predecessors. Rather, any improvement in results is due to the continued improvement in equipment.

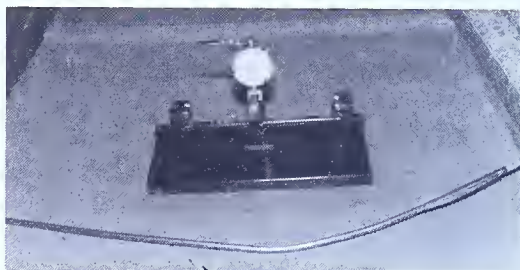
Some arrows available today are so close to straight that it takes the most sophisticated testing machinery to detect any imperfection. Unfortunately for confirmed purists and romanticists, such shafts do not come from the forests. They are possible only because of modern metal alloys and plastics. The most highly refined are aluminum. This subject was covered here in "Selecting a Shaft," November, 1984.

If you want the most nearly perfect shaft available, you will in all likelihood be dealing indirectly with Easton Aluminum, by far the world leader in the manufacture of aluminum arrow shafts. Both Japanese and Korean aluminum shafts have made their way into this country, but not enough is yet known here about them for comparative purposes.

### Alloying Elements

Aluminum by itself does not provide the properties necessary to produce a desired shaft, and alloying elements are added in varying compositions to provide strength. The stronger the resulting alloy, the less susceptible it is to taking a permanent set or bend. Arrow shafts, regardless of construction, must be able to accept stresses which bend them upon release and still return to their original shapes. Consequently, varying amounts of copper, silicon, magnesium, zinc, and other elements are added.

All aluminum shafts are not constructed with identical outside diameter and wall thickness, so each has a resiliency limit—a point beyond which it will not spring back to its original straightness. It takes a bend, or set. This may be quite obvious, or it may be barely perceptible to the naked eye. An obvious bend calls for attention sooner or later, and such an arrow is



**BADLY BENT** shaft and **Full Adjust Precision Arrow Straightener**, above. Right, Cotner uses unit to work on damaged arrow after setting up with straight one.

wisely set aside. A more insidious troublemaker is a slight bend which is missed.

Target archers are first to notice or suspect a bend in an arrow. At one time it was common for four archers to utilize the same target face. As proficiency and equipment improved, each contestant had an individual face at which to shoot. At some of the top tournaments now, each archer may have an individual target for each arrow in an end of three. All of these refinements have been introduced to reduce arrow damage since today's top archers could literally pound nails at 20 yards. In the professional ranks and world-class tournaments, so much hinges on each shot that no serious archer would attempt to shoot a questionable shaft in competition.

Precision shooters frequently damage arrows by hitting nocks or having one arrow kiss off another in the target. Field archers have fewer such problems as larger targets are stationed up to 80 yards away, and they have considerably more space within which to place arrows.

And yet, each shot that an archer makes, regardless of the target, should be the very best of which he is capable. The end result of such a shot may well







be determined by the straightness of the shaft.

A personal experience two years ago provided sad proof that even in hunting there is no leeway for carelessness. In this instance, I had bent one arrow slightly in practice shots on the Quebec tundra before going out for caribou. I stuck the arrow back in the far end of my bow quiver, thinking I would remember which it was, and hurried to the waiting canoe. Five good shafts should be sufficient for a day's hunt.

Some time later a young bull tempted me into a 20-yard running shot in a strong wind. Even as I recovered the errant shaft, my guide came out of the bush and motioned for me to follow quietly. From a huge rock he pointed to a real Pope & Young bull lying under a projecting slab of stone. My first shot was no more than two inches low at the target, which was reduced in size by the angle of the shot at a later measured 35 yards. The second was perhaps five inches high. I had him bracketed. Never taking my eyes from him, I nocked another arrow. The unhurried shot went substantially higher than the second!

As with the second shaft, this one ricocheted downward off the stone and may even have touched the animal. He'd had enough, and left. Later I remembered the bent shaft, and I strongly suspect it was my third ar-

row. I did score on a much smaller bull later—with a sure-enough straight arrow. But my carelessness probably cost me a real trophy.

So what can you do to make certain you have straight aluminum shafts if these are your choice for target, field, or hunting? There are several ways to visually check a shaft for straightness.

A time-honored method is to lean the shaft against a fingernail at a point just below the arrow's fletching and rest the point in the palm of the other hand. By blowing on the vanes or feathers, the shaft can be made to spin quite fast. Any serious bend can be detected by vibrations, or the nock will rotate unevenly. Just be sure that the nock is not improperly fitted on the shaft or it could fool you. Some archers are adept at using a similar method, except that the shaft is spun by the fingers of the hand holding the point end as it is propelled upward. A bend will cause the shaft to vibrate.

Another visual method is to roll the shaft on a level, or tilted, absolutely flat surface. It will vibrate or refuse to roll easily if it is not straight.

Minor imperfections can be worked out by hand if extreme care is employed to avoid further bending, or overbending, in the opposite direction. This is an imprecise method at best. But some individuals, such as Wayne Cotner, Bloomsburg, who was photographed for this column, have it refined to a near science.

### Beyond Repair

There are hand tools which can be used to remove obvious bends in a shaft. But unless it passes one of the visual tests after such treatment, the shaft should not be used for any serious archery purpose. If there is a bend near the point of an arrow, which is sometimes caused by another arrow hitting it, the shaft may be beyond repair for precision shooting.

Widely used by discriminating target archers, clubs, and custom archery shops is the type arrow straightener illustrated here. This one, designed by



**TERRY MOORE** twirls shaft against rigidly held fore-fingernail to detect any flaw in arrow. It takes experience and practice to use this method successfully.

Robert H. Kaufhold fifteen years ago, is manufactured at Full Adjust Products, an industry operated jointly by Robert and his son, A. Robert Kaufhold. It has been utilized by the three modern United States Olympic teams and by every U.S. World Championship team. It is one of a number of archery products produced by the machine shop at 2195 Old Philadelphia Pike, Lancaster.

Actually, a similar straightener is used by Easton Aluminum to check shafts at three points to within .003 to .005 before they leave the factory. Despite this close quality control, top tournament archers further straighten raw shafts to within .001 of an inch before shooting them.

To test the Full Adjust straightener, and for photos, we utilized an aluminum arrow of mine that didn't make

it through the brush on a shot at a deer this past season. Wayne Cotner first worked on the shaft by hand to remove the exaggerated bend as much as possible so that it would fit into the mechanical device. Only one who has attempted to straighten an aluminum arrow by hand can appreciate the forces required to bend a 20-18 shaft such as this one.

We first placed a nearly perfect 20-18 shaft of the same size in the Full Adjust so that the dial, which indicates the degree out of line of any shaft, could be set on zero. Consequently, when the damaged shaft was substituted, every imperfection was immediately shown in thousandths of an inch as the dial itself has marked graduations of .001. When a spot is shown to be out of alignment, a lever is depressed to place sufficient pressure on the shaft against the bend to straighten it.

Although Wayne had done a masterful job in removing the horrendous bend in our sample shaft, the sensitive machine immediately indicated the limitations in attempting to manually straighten an aluminum shaft.

### Rollers

To support the arrow shaft in the device, two sets of finely attuned rollers are spaced ten inches apart. Each has a thumbscrew to permit traverse on a bar which supports their brackets. In this way, rollers can be moved so that more or less pressure can be exerted where needed by the lever which activates a rounded metal pressure point against the arrow shaft. The shaft is rotated for testing by thumb pressure on it at the point where it rides the rollers.

However you choose to align an aluminum shaft, employ a method that will justify as nearly as possible the observation: "Straight as an arrow."



# Harder Than Lead

By Don Lewis

Photos by Helen Lewis

**A** BRIGHT January sun glared over the horizon, wiping out any chance of seeing a low-flying goose coming from the east. This was a real setback as my schedule called for a mid-morning departure. To add to my frustration, the geese were rising out of a marsh behind a hill some 300 yards distant. Many came right out of the sun and swung over my blind, but the bright glare kept me from seeing a target until the last moment, leaving little time to evaluate the distance. It appeared to be a lost morning.

Time was running out on me, and by nine o'clock I had fired at only two birds, connecting on the last one. Another hour passed without a sign of a bird. I began gathering up my gear. When a buildup of ragged clouds cut in front of the sun, the glare was gone, but so were the birds. I was disgusted to say the least.

I was halfway out of the in-ground blind when two Canadas cleared the hill and came smack at my blind. I slid down on the swivel-type seat and reloaded. Both birds were less than 50 yards up and coming in fast; it would be jump and shoot.

## Dead Center

My shot was dead center on the lead bird, sending it plummeting earthward. I caught the other goose too far back as it turned for the marsh. The bird was hard hit, but it took a third shot from the 1100 Remington 12-gauge to drop it. It landed over 60 steps from the blind, but I judged the shot charge traveled about 50 yards. Still, that's a long shot, especially with steel shot.

I'm not going to get wrapped up in the lead vs. steel shot controversy that's sweeping through the waterfowl ranks at the moment, but it's almost certain



**LEWIS checks shell reloaded with steel shot on the MEC SM77 Sizemaster press. A good quantity of shot and powder must be kept in the hoppers to ensure consistent charges.**

that lead shot will be prohibited in some areas from now on. As things stand now, steel shot is required in what can be called non-toxic zones.

I said I would stay clear of the controversy, but it's fair to state that steel shot is in no manner ballistically equal to lead shot. Nor will it ever be. On the other hand, steel shot is not worthless, as some waterfowl hunters claim. Since my waterfowl shooting is very limited, I'm in no position to give an authoritative view. Nevertheless, the waterfowl shooting I've done with steel shot leaves me wondering about some of the wild tales I've heard.

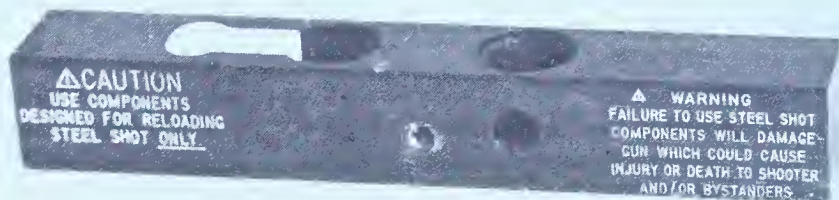
Practically from the first day steel shot was introduced, there has been a warning not to reload it. The reason was simple: until recently, steel shot reloading information was nonexistent.

Far too many unknown factors were involved with steel shot to make it safe for home reloading.

Steel shot is substantially different from lead. Just consider the hardness. The old drop shot used in shotshells years back was made from nearly pure lead that tested out at 25–30 on the Diamond Pyramid Hardness (DPH) scale. Lead shot to which antimony

loads, as defined by the Sporting Arms and Ammunition Manufacturers Institute (SAAMI), should have an average maximum DPH of no higher than 90 (ANSI/SAAMI Z299.2-1982). Steel shot, even of the proper hardness level, then, is about three times harder than lead.

There may be light at the end of the tunnel for the waterfowl hunter wanting to reload his own fodder. From Non-



**MEC steel shot bars have soft insert next to shot cavity to allow wedged pellet to sink into it. Note printed warning.**

has been added pushes it up the scale to 30–35 DPH, depending upon the antimonial percentage.

Steel balls fabricated from low carbon steel wire are chopped, headed, ground or rolled into a ball. Some are even polished to gain a more spherical shape. All this working tends to harden the steel ball, and the end product can run as high as 180 DPH. Ball bearings can even go higher. Air rifle shot and steel balls used for sand blasting often start at 100 and go to 190 DPH. Such hard shot, if loaded into shotshells, will cause extensive damage to gun barrels. Also, because the harder the pellet the less its compressibility, the higher the DPH of the pellets the higher the chamber pressure tends to rise with a given load and the more strain on the barrel as the shot charge passes through the choke area.

Hard steel pellets can damage barrels even if loaded in properly designed plastic shotcups that keep them from touching the bore. To get them soft enough to prevent this, they must be annealed. Proper steel for shotshell

Toxic Components, Inc., P.O. Box 4202, Portland, Oregon 97208, I obtained ten pounds each of their No. 1 and No. 4 soft steel Ecoshot, a bag of unslit plastic steel shot wads, and a wad splitter designed to be used in conjunction with any MEC single-stage shotshell reloading press of the same gauge and shell length for which you are reloading. Included also was their "Steel Shot Reloading Manual" and a suggestion I read it thoroughly before attempting to reload.

### Three Times

I not only read the manual through once but roughly three times before I cranked out my first steel shot reload. Since my experience with steel shot reloading is still in the beginning stage, all data and information presented in this article comes directly from the NTC reloading manual.

All their tests had been done on a MEC SM77 Sizemaster retrofitted for steel shot, so I ordered the same model from Mayfield Engineering Company, complete with a Steel Shot Adapter Re-



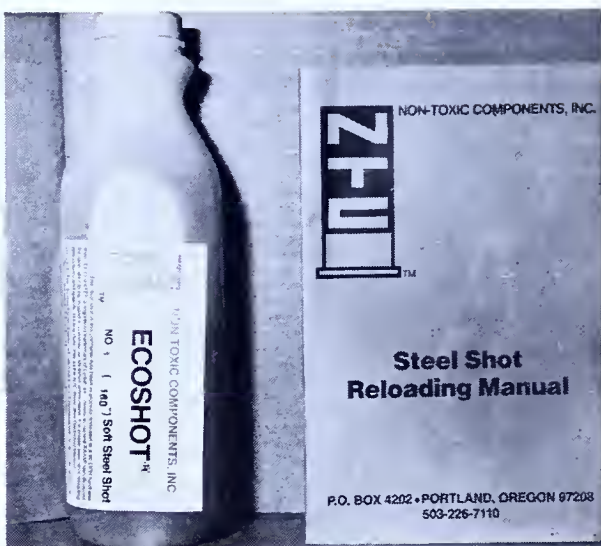
loader Kit and four steel shot charge bars to handle No. 1 and 4 steel shot.

With lead shot, only one shot charging bar is normally used for a given weight of shot, but with steel shot, it takes two. One bar handles the larger shot sizes, the other the smaller sizes for each charge weight. However, I should point out that it's almost impossible to throw an accurate charge weight of lead for all shot sizes with just one charging bar. In effect, one bar can only contain a compromise shot cavity which probably drop light charges with large shot, right on the money with some sizes, and heavy charges with very small shot. Not a very precise way of doing business. Undesirable to be sure, but probably not dangerous with lead. Since interior ballistics with steel shot are more demanding and less forgiving than with lead shot, it's imperative to use only very accurate steel shot charge weights.

### Single Unit Container

The NTC wads for steel shot have a single unit shot container consisting of a shotcup connected directly to an over-powder cup. Unlike some wads for use with lead, there are no cushioning posts. The steel shot wad is made from a higher density plastic than that used to make a lead shot wad. Also, the petals of a properly designed steel shot wad are much thicker because the entire design goal of the steel shot wad is the opposite of the lead shot wad. The lead shot wad is designed to protect the soft lead shot. A steel shot wad is designed to protect the shotgun barrel from the hard steel shot.

Most shotshell reloaders use the powder bushing suggested in the



**NON-TOXIC Components produces soft steel Ecoshot with a DPH of 90. Reloading manual which comes with shot gives specific instructions on loading steel shot and exact components which must be used.**

loading data. They take for granted that it will throw the exact weight for the powder listed. A slight variance in lead shot powder charges may not pose any danger although every attempt should be made with any type of reloading to hold powder charges to plus or minus three-tenths of a grain. With steel shot powder charges, it's imperative to be this accurate.

It's almost impossible to manufacture a powder bushing that throws the exact powder charge called for in the reloading data. Bushing charts are guides only and should be interpreted as indicating approximate powder weights only. Don't take anything for granted; use a good scale to double check the powder charge thrown by a bushing, and alter it until it throws the exact weight desired. A bushing may have to be reamed out slightly to bring the charge weight up, or it might have to have an insert installed to reduce the powder charge.

Never use lead shot charging bars for reloading steel shot. MEC, to avoid possible confusion, makes their steel shot charging bars black (lead shot bars



**WAD SPLITTER**, left, will fit any single-stage MEC press. Above, differences between lead shot wad, left, and steel shot wad are obvious. Former protects shot from bore; latter protects bore from shot.

are red) with yellow letters for the weight and pellet size each shot bar will throw.

Existing lead shot bars cannot be used to load steel shot because steel pellets which wedge or jam between the charging bar and holding plate will not shear off as do lead pellets. To alleviate this problem, a soft insert is built into the steel shot charging bar near the shot cavity; this allows the steel shot pellet to compress into the insert instead of jamming. Also, these steel shot bars are drilled with the correct cavity to throw the desired weight of steel shot. They are for steel shot only.

Finally, choice of powders is still very limited for steel shot reloading. Excellent powders such as 700-X, Red Dot, and 452AA have no place in steel shot reloading. The NTC reloading manual lists only SR 4756 and 800-X for 12-gauge steel shot loads. I might add to this that not all shotshell cases are suitable for steel shot reloads. Stick with the hulls suggested in the manual.

It's clear by now that steel shot reloading is vastly different from lead shot home loading. The actual mechanics of

assembling the shotshell are similar to lead shot reloading, but the approach differs. For instance, when tackling steel shot reloading for the first time or two, three to five shells should be reloaded just to give the press a chance to settle down. This will give the operator a chance to check out the press and bench for excessive vibrations which can play havoc with powder charges. Don't use these first reloads.

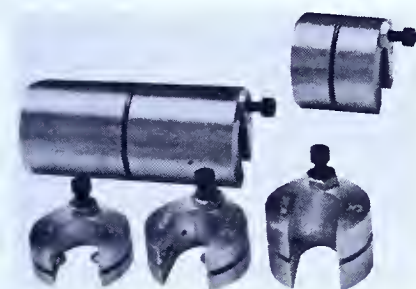
It should be obvious that steel shot reloading shouldn't be taken lightly; it's a different ball game. Use care and plenty of caution. Don't experiment, ever. Never reload steel shot of unknown hardness or harder than the recommended 90 DPH. Follow the reloading manual to the nth degree, and until you are certain of the consistency of both the powder and shot charges thrown by your tool, I'd suggest you weigh both for every shell.

Steel shot reloading is time consuming, and patience is a must. That's the price we must pay if we want to load shotshells with pellets harder than lead.

I'll have more about this subject in a future column.



Smith & Wesson recently divested itself of its ancillary items (long guns, holsters, etc.) to devote full attention to handguns. Noteworthy is the new M645, the first American-made double-action, stainless-steel 45 Auto (right). It is 8.7 inches overall, weighs 37.6 oz. empty, has a 5-inch barrel and an 8-round magazine. The M645 has three safety features: manual safety, magazine interlock, and internal firing pin safety. Also new are Models 469, 24 and the 49 Bodyguard in stainless steel.



CCI now supplies trim gauges in six lengths to handle cartridge cases from the 380 ACP to the 8mm Remington Magnum. An adjustable screw and lock nut make for quick adjustment to obtain desired case length. Gauges are adapted to the RCBS case trimmer.

CCI also has a new 9.3mm (.366 diameter) Hot-Cor bullet for use with the 9.3 x 62, 9.3 x 74R and other European cartridges. Semi-spitzer in form, it weighs 270 gr. (Omark Industries, P.O. Box 856, Lewiston, Idaho 83501)

## **Game Fund Contributions—1984**

The Pennsylvania Game Commission is permitted to accept donations from any individual, association, corporation or firm. Each year many make contributions. This money goes toward the purchase of land which is used by many thousands of outdoor people. Our records for 1984 indicate that the following persons and groups donated to the Game Fund:

Paul Horna, Springfield; Rockwell Reading Chapter NMA, Reading; Mr. and Mrs. William Storey, Dalmatia; Garrie Taylor, Littlestown; Charles M. Howell Lodge 496, Millersville; Mr. and Mrs. Michael F. Birchak, Latrobe; Lancaster County Bird Club, Ephrata; John Bulinsky, Brunswick, Ohio;

In memory of Andre Violante, Lansdale, by Christine and Gregor Ritchie, D. William O'Hara, Jr., Kathleen and Bill O'Hara, Emily J. Szczepanski, Mary Violante, Lansdale; Vicki, Tom and Brent Rossbach, Pontiac, Mich.; Mr. and Mrs. William O. Foust, Flourtown; James C. Upton, Spring Creek; Richard A. Weimer, Bethlehem; Berks County Pomona Jr. Grange, Kutztown; Mrs. Norine Picciano, Greensburg; Anthony Baptist Church, Linden; Alan

Youngquist, McKean;

Pennsylvania Department, Daughters of Union Veterans of the Civil War, Grove City; Pearl Feather, Imler; Daniel A. McLucas, Burnham; Fred Grena, Brownsville; Barbara Ebling, Womelsdorf; Steffee Home & School, Seneca; Susquehanna Regional 4-H Fund, Sunbury; Robert B. Childs, Waynesburg; Charlotte D. Fisler, Wescosville; Armstrong County Conservation League, Leechburg;

Lancaster Road Runners Club, Lancaster; Richard P. Ely, Upper Darby; Berkeley Hills Garden Club, Glenshaw; Shannock Valley Sportsmen's Club, Rural Valley; Mr. and Mrs. Paul E. Horna, Springfield.

Many individuals also contributed at the Pymatuning, Middle Creek and Siegel Marsh visitors' centers.

If we have inadvertently missed giving credit to any deserving person or group, we apologize. The many contributions, large and small, help Pennsylvania's wildlife management program and testify to the sincere concern of Pennsylvanians and friends in other states for the Keystone State's wildlife resources.

# *In the wind*

bob mitchell



The U.S. Court of Appeals apparently has ended a negligence suit filed against the NRA after a gun stolen from the association's office was used subsequently in a burglary attempt in which the victim was killed. The plaintiff, administrators of the deceased's estate, initially had been awarded \$2 million in damages, but the NRA appealed the case to a District Court which ruled there was no evidence of negligence on the NRA's part. The case went to the Court of Appeals, which upheld the District Court's decision. The case could be appealed to the Supreme Court, but such a move is considered unlikely as no federal issues were raised in the case.

**Twenty-three wolves were counted on Michigan's Isle Royale this past winter, marking the third consecutive year the population has remained at that level. After fluctuating between a high of 50 in 1980 to a low of 14 in 1982, the wolf population appears to have stabilized, primarily because the populations of moose and beaver, the wolves' main prey, have also stabilized.**

The greatest threat to weaken the federal Endangered Species Act when it comes up for reauthorization this year is expected to come from several Western states where up to 40 proposed water diversion projects on the Colorado River threaten four species of endangered fishes. The National Wildlife Federation is anticipating water developers and energy producers to seek exemptions from the requirements stipulating instream flows be maintained to protect the endangered fish and their habitats.

The New York Department of Environmental Conservation is developing pet trade regulations to limit the sale of wild birds, including those not considered native to the United States. Under proposed regulations, only birds born and raised in captivity could be sold, and most will have to be permanently banded. New York is the first state to pass a law to protect all wild birds from sale in the pet trade.

The Michigan Department of Natural Resources has terminated its volunteer conservation officer program because the state attorney general's office cannot provide legal services to the volunteers, leaving them in "unjustifiable personal risk." This decision was made after a convicted lawbreaker sued a state conservation officer and the volunteer who was accompanying him when the violator was arrested. Attempts are now being made to change the law so Michigan's volunteer law enforcement officers can receive legal support from the state.

At least six young tom turkeys died last winter after eating berries from ornamental yews planted around homes and cabins in Michigan. Technicians for the state's Department of Natural Resources Lab determined positively that the plant's berries were toxic to the birds. The ornamental yew is often called ground hemlock, and has purplish berries that smell like juniper.

This past fall biologists in Virginia went back to an area where they had released some Delmarva fox squirrels in 1982 to check if the stocking effort was succeeding. During a two-week trapping period, five fox squirrels were captured. Two, a male and a female, were among those originally stocked. Another, a male, had been born there in 1983, and the other two, both females, were born last year.

**Last year 130 young bald eagles were produced from the 124 active nests counted in the Chesapeake region. This is the highest number of birds fledged since 1977, when the National Wildlife Federation's Raptor Information Center launched its banding and productivity study in the Chesapeake Bay area.**





Shown above is the fourth in the Game Commission's annual series of embroidered patches and decals offered through the Working Together for Wildlife program. Funds derived from the sale of these and other selected items are used specifically for non-game research and management projects. Bald eagles, otters, ospreys and eastern bluebirds are just a few of the animals being helped in Pennsylvania, thanks to the people who've been supporting this program. This year's patch is priced at \$3, and the decal at \$1, delivered.

Make check or money order  
payable to:

PENNSYLVANIA  
GAME COMMISSION  
Dept. AR  
P.O. Box 1567  
Harrisburg, PA 17105-1567



*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in **GAME NEWS**. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



# PENNSYLVANIA GAME NEWS

JULY, 1985

60 CENTS



GERALD W. PUTT  
© 1985



*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in **GAME NEWS**. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doebler, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starnes**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info Systems

**GAME NEWS**

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**GAME COMMISSION**  
(717) 787-4250

**FEATURES**

<b>Call of the Outdoors</b> .....	3
By Jack Hubley	
<b>Tattletale</b> .....	6
By Al Shimmel	
<b>A Seed Is Sown</b> .....	11
By Bob Mitchell	
<b>Cross-Firing</b> .....	17
By Bob Latimer	
<b>Hunting Pennsylvania Game With a Canon</b> .....	19
By George Sheldon	
<b>Unmasking Muskrat Secrets</b> .....	24
By Joseph Kosack	
<b>The Vultures of Gettysburg</b> .....	27
By Jeffrey B. Roth	

**NEWS**

<b>Field Notes</b> .....	34
<b>Conservation News</b> .....	39
By Ted Godshall	
<b>Books in Brief</b> .....	46
<b>In the Wind</b> .....	64
By Bob Mitchell	

**COLUMNS**

<b>Young Artists Page</b> .....	43
<b>Another View</b> .....	44
By Linda Steiner	
<b>Outdoor Wildlife Learning</b> .....	47
By Bill Einsig	
<b>DGP Diary</b> .....	49
By Joe Carlos	
<b>Thornapples</b> .....	51
By Chuck Fergus	
<b>Summer Scouting (Archery)</b> .....	56
By Keith C. Schuyler	
<b>Game Cooking Tips</b> .....	59
By Carol Vance Wary	
<b>The Magnifying Glass (Guns)</b> .....	60
By Don Lewis	

**COVER PAINTING BY GERRY PUTT**  
(Cover Story on page 10)

## Should We Always Shoot?

THERE'S SOMETHING ABOUT shooting small bears that seems wrong to me. Admittedly, extensive research has proved that biologically this is just a practical use of the resource. For that reason, since 1981 hunters have been allowed to take bears of any size in Pennsylvania during the specified season. Nevertheless, it doesn't seem the proper thing to do. A 40-pound bear just isn't a real trophy.

Many others feel the same way, I'm sure. The Game Law requires that every bear harvested in the state be brought to a check station so that biological data can be collected by Commission officers. When a hunter arrives with an unusually small bear, it's not unusual for bystanders—other hunters as well as nonhunting onlookers, newsmen, photographers, whoever—to offer comments which can at best be described as critical. Such comments are unfair to the hunter, for he in no way violated the Game Law by taking that animal. Yet they do show some of the feeling which is aroused by the sight of a small dead bear. For many persons, the reaction is moral rather than legalistic. They can listen to the facts as detailed by a researcher and know in their minds that they are true, but their gut reaction is: "That's wrong." Or maybe it's their "heart" reaction.

Of course, the criticism comes from the guys who didn't shoot. It's easy to be superior when you aren't the one who was faced with a split-second decision, perhaps under conditions which made it impossible to know even reasonably well what size bear was in the sights. Few persons have the ability to look at a lone bear in thick cover on a shadowy hillside, an indeterminate distance away, and make a reasonably accurate estimate of its size. And more than likely that bear is the only one that hunter has ever seen in the woods—or ever will see. It isn't really fair to criticize him if he shoots. And it's understandable that he might remark, "A bear is a bear," as one did last season when derided for the small size of his trophy.

However, even if we accept the fact that many small bears are shot simply because the hunter could not tell their size, we are still left with the nagging moral question of whether anyone should *deliberately* kill one. That's something the individual hunter has to decide when he faces his moment of truth. The bear is there, he is there, the gun is there. The conditioned reflex is also there—or perhaps it's even more basic, an instinct derived from a hundred thousand generations of hunters. Maybe it's simply temptation, or a moment of machismo.

Whatever it is, a shot is fired or it isn't fired. I believe many can pass up such an opportunity. That takes dedication to an inner set of personal rules, a willingness to conform to higher standards than the law requires. And it may cost you your only bear of a lifetime. But the rewards can be great. There's always the chance that the small bear you pass up this season will make you a tremendous trophy later. And there's incalculable satisfaction in knowing you could have shot but didn't. The choice is almost godlike. Think about it.—*Bob Bell.*



Thirty Years . . .

# "Call of the Outdoors"

By Jack Hubley

**F**OR MANY Pennsylvania sportsmen the hunting calendar is etched in stone, no more malleable than April tax time or Sunday church. The first day of the first of the four months ending in b-e-r is automatically spelled d-o-v-e-s, and Thanksgiving morning means that deer camp can only be four days away.

And turning again to the Sabbath, for outdoorsmen within southeastern Pennsylvania's Channel 8 viewing area, Call of the Outdoors has become just such a benchmark for three decades, as much an institution as Sunday dinner itself.

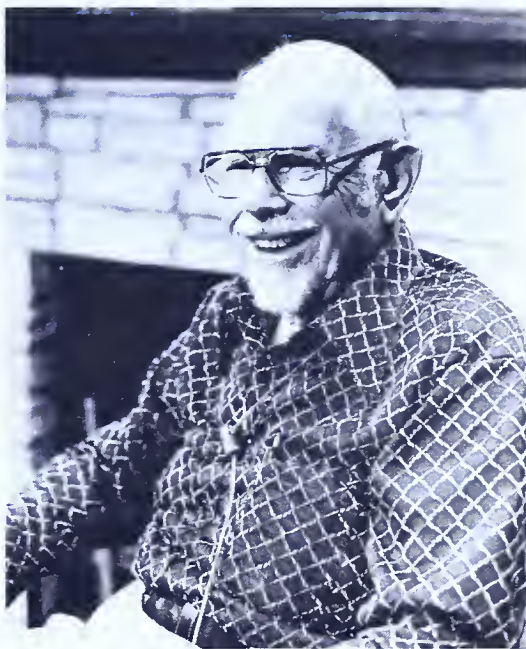
This year Call of the Outdoors celebrates thirty years of bringing hunters and fishermen together for an armchair look at the outdoor world. But the show is much more than a televised potbelly-stove yarnspin session; it focuses on a wide variety of nature and environmental topics as well as hunting and fishing.

"Programs come and go," says Channel 8 program manager Nelson Sears, "but here's a show that continues to have a loyal audience."

The show's audience is as extensive as it is steadfast. According to the November, 1984, Arbitron Ratings, Call of the Outdoors is the most popular show within Channel 8's eleven-county "area of dominant influence." Of all the television sets turned on in southeastern Pennsylvania during the show's time slot, 29 percent were tuned to Call of the Outdoors. "No other show comes close to those kinds of numbers," says Sears.

Harry Allaman, the show's first host, certainly can be credited with getting Call of the Outdoors off to a running start.

"You could always count on Harry to



Tom Fegely

**HARRY ALLAMAN**, of York, originated Call of the Outdoors in 1955 and was its host for a quarter-century, bringing the outdoors indoors to countless viewers, most of whom regarded him as a personal friend.

come up with interesting programs," reflects Sears, who adds that the Channel 8 studio has played host to scores of unusual guests from bees to mountain lions. "I can remember Harry bringing in snakes and having them crawl around the studio floor. We were running cameras and sidestepping snakes all at the same time," he chuckles.

Allaman was a member of the York Chapter of the Isaac Walton League. In 1951, he began doing a half-hour radio show on York's WSBA radio entitled Outdoor America. With his broadcasting and outdoor experience as credentials, he approached WGAL with the idea of producing a weekly outdoor show, and in October, 1955, Call of the Outdoors was born. That was only less than seven years after the Lancas-

ter station went on the air on March 18, 1949.

Allaman's first show dealt with the Appalachian Trail. "I was really impressed with that show," Sears recalls. "The diversity of Harry's subjects always amazed me. He did a program on gliders and actually went up to shoot the movies. And I remember one fellow who had a rattlesnake crawl through his collar on the show. That's okay for some experts, I guess, but it's difficult on the cameraman's nerves."

### Varied Programs

Cal Glattfelder, vice president and general manager of the Glatfelter Pulp Wood Company, agrees that Allaman's varied program menu contributed to the show's far-reaching popularity.

"Harry was concerned about bringing to viewers a show that would be of interest, and he tried to have something for everyone," Glattfelder points out.

One of Call of the Outdoors most important fans, the Spring Grove-based manufacturer of printing papers assumed sponsorship of the show in January of 1956, and 30 years later,

has no plans to abandon ship. It is believed no other outdoor program in the country can claim such a long-standing relationship with one sponsor. "The outdoors plays a big part in our entire manufacturing process," stresses Glattfelder, "and we want to make sure that what goes on in the outdoors is brought to the attention of the people."

In an effort to hold that attention, Allaman began to shoot his own movies in the late 1950s.

"Harry was always inventive, so he got his own equipment," says Nelson Sears. "He would shoot the film, and we would develop it and help him edit it. His wife Catherine was co-producer on many of his trips," Sears adds.

Sears notes that the outdoor host made "a million friends" through his extensive travels, including the legendary fisherman Joe Brooks and outdoor cinematographer Wally Tabor. But one friendship in particular would shape the future of Call of the Outdoors more than any other.

During the late 1960s, Harry Allaman met Tom Fegely, a young outdoor writer. A close friendship resulted. And in November 1980, after steering Call

**TOM FEGELY interviews officers of the Pennsylvania Deer Association during a taping session at WGAL studios in Lancaster.**

Betty Lou Fegely





of the Outdoors for a quarter of a century, Allaman turned the wheel over to his younger protégé.

In addition to his programming responsibilities, Fegely is outdoor editor for the Allentown Call-Chronicle, and fills out his schedule with assignments for "Outdoor Life," "Pennsylvania Forests," "Pennsylvania Sportsman" and other magazines.

"I often wondered how we could replace Harry," says Sears, "but Tom fits the bill to a T. I'm amazed at the way his programs continue the format created by Harry."

### Continuity No Accident

After discussing the show's direction with Fegely, it becomes obvious that this continuity is no accident.

"I try to maintain the show as Harry did it," he says, noting that about 80 percent of the programming is geared toward hunters and fishermen. "We seldom do anything exotic," adds the show's host, stressing the importance of airing local and regional adventures which are within reach of the show's viewers.

Fegely says his two most popular topics are deer hunting and Susquehanna fishing, with turkey hunting coming in at the number three slot.

"I don't do the blood and guts sort of thing, but, on the other hand, if you shoot a turkey, you've got to *show* a turkey," he stresses. "I do like to keep the show moving, and I insist on visuals."

Fifty to 60 percent of such visuals are shot by Fegely himself, who learned the movie-making business from Allaman.

"When I go on a hunting or fishing trip, the last thing I do is pick up a gun or a rod," says Tom, who points out that producing eighteen minutes of usable film footage, "takes eighteen hours of work."

Fegely requires no such rigorous pre-show preparation of his guests, about half of whom, he estimates, have had no on-camera experience. "I never prepare a script, and I don't rehearse. With the person unaccustomed to appearing on television, it's better not to."



Charlie Heidecker

**TOM and HARRY discuss some of the points they intend to make during a program on wildlife photography. Harry never used a formal script for his shows, and neither does Tom. The relaxed manner and extensive outdoor knowledge of the show's host make things easy for guests.**

Fegely's off-the-cuff approach to filming the show's coffee table sessions seems to work well. After nearly five years of taping Call of the Outdoors the host recalls only two guest who have frozen, requiring a re-take.

Like his innovative predecessor, Fegely enlists the aid of his wife Betty Lou to keep the show's production schedule running smoothly. As during the Allaman era, Call of the Outdoors continues to be a high-noon-on-Sunday success story, with its host receiving many letters and phone calls each month from viewers living from the Delmarva peninsula to State College.

"Nature offers a constancy that we all feel comfortable with," concludes Nelson Sears. Call of the Outdoors offers this same constancy."

With thirty years of durability to its credit, it looks as if the show's 200,000 viewers will be answering the call for many years to come.





*To some hunters the blue jay is a noisy nuisance.  
To others it is an asset to success . . .*

# TATTLETALE

**By Al Shimmel**

**I**T WAS midafternoon. Sunlight slanted through the hardwoods and brightened the edge of the ridge. Acorns were pattering down in such numbers that it sounded like a summer shower when the first big drops are falling. I watched a buck and two does feed slowly up the ridge. The buck stopped now and then to rub against a sapling. Through my binoculars I could see that his antlers were free of the velvet that had sheathed them recently. A few yards from my stand, a shallow notch in the ridge led down to a wide bench where a mature stand of white oaks shaded out the understory except for a few clumps of mountain laurel.

I was standing beside a small oak, screened from the trail by a laurel clump and from above by a low drooping branch, heavy with leaves. The approaching deer were hidden by the steep pitch of the ridge. Within a few yards of my stand the trail crossed a patch of light. I checked the camera's aperture and shutter speed. Everything was in readiness. Satisfied, I waited. Soon I made out the sounds of their coming. I caught glimpses of movement and the faint crunch of an occasional acorn beneath their hoofs. I crouched slightly and slowly raised my camera. A yard or two more and. . .

The branch above my head jarred slightly. A jay screamed. There was a blurred image of the south end of a deer heading north. The jay screamed again, and then the woods was still. I had instinctively tripped the shutter. When the film was developed, the image of the deer's tail end was printed perfectly. It is one of my prized possessions, although I seldom exhibit it to others.

Eventually, the humor of the situation had its impact, but not that day.

I wonder how many times the feathered busybody has spoiled an otherwise perfectly planned strategy, turning almost sure success into defeat. Even the famed Nash Buckingham wrote some very uncomplimentary observations concerning the jay.

The blue villian has been the cause of much profanity. Hunters in particular voice pointed remarks, utter threats, and even make an occasional attempt on its life, yet the jay goes blithely on its way. The ancient who wrote of "a busy-body in other men's matters" surely had the jay in mind. The observation fits the bird as neatly as his suit of blue, black and white feathers.

There are times when the jay's morals (if it has such) leave much to be desired. He has been observed plundering other birds nest. There is ample proof he is a killer, noisy coxcomb, mimic, brawler, a cunning mischief. He has been called many unprintable but highly descriptive names, and deserves every one of them. But, like so many rascals, he has many interesting qualities.

## Mischievousness Helps

There are times when the very mischievousness that betrays the hunter is reversed, and works in his favor. Many years ago I spent considerable time still-hunting a good buck. He was a wise campaigner and eluded my best efforts. One morning, after I spent some hours in his area, he began to circle a knoll that stood between two mountains. Knowing he was not too far ahead, I determined to head him off. I left the trail, crossed the knoll and crouched

behind a convenient snag. I waited a quarter-hour. No buck. Another quarter-hour passed. I began to get restless. He had stopped in some thicket where he could watch his back trail, I thought. I stood up slowly and surveyed the sidehill from the protection of the snag. A hundred yards below, a thicket of scrub and laurel caught my eye. I was searching it carefully with my glasses when two jays flew up from the valley below. They began to flit here and there through the thicket. Suddenly one shouted, "Scapel! Scapel!" and the other came flashing in to join its mate.

From my vantage point I saw the buck sneaking from his hide, head close to the ground, apparently hoping to get away without being observed.

Again the jays screamed. Then not two but at least a half-dozen more swarmed in to join the chase. They buzzed the buck, shouting and jeering. Dropping pretense, he shifted direction and sped toward the top of the knoll and my snag.

The kill was an anti-climax. He came so close I could almost have touched him with my rifle muzzle. Momentum carried him a dozen feet.

### Always Present

The patio doors of my study overlook the garden and back lawn. The yew and privet hedge form part of the sanctuary and protect the area from wind and snow. The brook, confined between stone walls, has a tiny waterfall to add its murmurings to the scene. Scarcely a daylight hour passes that some birds are not present, including a quota of mischievous jays.

If I neglect to fill the feeders or place their quota of peanuts on the door sill, they berate me for my carelessness and occasionally add a few expletives. No one could accuse jays of being slow learners. An example was the fledgling that followed an adult to the patio and begged the older bird to feed it bits of broken bread we provided. After a while the adult grew tired of that when her offspring was capable of feeding itself. She ignored the greedy young-

ster's demands until it grew hungry enough to experiment on its own. Selecting an extra large fragment, it stabbed at the bread with some vigor. The flagstones proved unyielding. The fledgling backed off, shook its head and studied the problem. Finally it approached the crust and, holding its bill almost parallel with the stone, scooped it up and fled triumphantly to the trees. From that day on it held its head at an acute angle when feeding on the patio. The jay is not a slow learner.

Some of the jays that patronize our feeders are third and fourth generation birds. Many followed their parents here as fledglings. Finding they are protected, they drop much of their caution. Thus we can observe them at close range. That does not mean they have forgotten their native caution. We notice a subtle difference between their boisterous "Jay! Jay!" and the same call when a stranger appears or a predator is lurking in the vicinity. Not only is the warning understood by other jays, but other birds also are alerted to the danger.

For three years a sharp-shinned hawk frequented our area. At least once each week we observed it darting along the hedge toward the feeders near the patio. The first indication of its presence would usually be the sudden disappearance of the small birds. Often the alarm of a jay drew our attention. We might see the little hawk perched in hiding among the branches of the apple trees near the hedge. Sometimes we would spot it sitting close to the trunk of the Norway spruce that dominates the backyard. The whole area would be empty of birds. Not one would stir from its hiding place in the close-cropped hemlock hedge or in the yew growing in the angle between the steps and the patio.

Only when a blue jay made its appearance would the smaller birds resume feeding. Occasionally, when the jay wished to have some choice bit of food to itself without competition, it would perch in the Norway spruce and shriek its alarm. When the other birds



retreated, it would grab all it could and fly away, leaving the others to forage in peace.

One autumn I undertook to bag a turkey with a head shot from a rifle. I failed in this project, but was thrilled by the experience. Several times I felt sure I'd be successful, but fate always intervened.

### Ideal for Riflemen

State Game Lands 98 is ideal for the rifleman. A large oak had fallen during the summer when it was in full leaf. The inclined trunk gave easy access to a comfortable seat in a crotch some eight feet above the ground. Just beyond the oak was a brook. Its origin was in a spring a hundred yards above. It flowed along the foot of a gentle slope where several clumps of witch hazel and thornapples provided abundant turkey food. Six of the seven mornings I occupied my perch, turkeys fed within 30 yards. It would have been easy to take a bird with a shotgun, or even with a rifle bullet through the wing butts. But I could not get a head shot. Nevertheless, I enjoyed my hunting that season more than any year when I made a kill by another method.

Frost had opened the witch hazel, and when the sun warmed the air black seeds were scattered like shrapnel from their spring loaded capsules. The big birds seemed to know the exact time the seeds would be scattering and came to rake through the leaves and gather them. Gravel along the brook was an added attraction.

I had never realized until that year how seldom a turkey's head is still. I'd read of old-time shooting matches when turkeys were confined to a box with an opening through which the head and neck could be extended at the whim of the bird. The objective was to kill the bird by a head shot. I had formed the opinion that such a shot would not be difficult at 30 yards, which was the accepted distance. This had led to my resolve to try for an unconfined wild bird. My opinion has undergone a change.

The only obstacle to my goal was an



**THE JAYS** discovered the owl in a hemlock. With renewed vigor they harassed it from its hiding place and followed it toward the dense thickets far below.

abundance of blue jays. They seemed to be everywhere. Although the oak's leaves formed a natural concealment, the prying eyes of a jay occasionally found my hiding place and announced it to the woods.

Each morning I eased down the hill in the gray dawn and was in my place long before sunup. One morning I saw a horned owl almost catch a gray squirrel. The squirrel eluded it by popping into a den hole. The frustrated owl flew a short distance and perched in the top of a hemlock which seemed to afford concealment. Shortly after full light, I heard the jays far up on the opposite ridge. Their din moved down the slope in my direction. A short time later a bear came into sight, nosing among the leaves to gather acorns, apparently unconcerned about the tell-tale flock that advertised its presence. It finally passed from sight, followed by the noisy jays. A short time later they came back, and discovered the owl in the hemlock. With renewed vigor they harassed it from its hiding place and followed it toward the dense thickets far below.

Twice the jays announced the coming of turkeys. For their association with the seven birds that comprised the flock, the jays took a different tone

### Cover Story

Instead of taking up residence along side their shorebird cousins, killdeer come inland to set up house-keeping. They can be found throughout the state in a wide variety of habitats, often in proximity to man. The two prominent black breastbands help identify this bird.

than for the bear and other creatures. It was lower in pitch and seemed more subdued, as if they enjoyed associating with the larger birds.

One day the old gobbler of the flock moved down to the spring run to gather gravel. Following him with my scope, I had the feeling I was about to be successful. But his head moved so much I could not be sure of a shot. Suddenly he turned, and then was still for an instant. My finger was applying the final ounces of pressure to the trigger when a jay landed on a twig and screamed in my ear. I was so startled I must have blinked. My impression was of a black shadow disappearing into the dark cover. It is well, perhaps, that the jay disappeared also.

Not long ago a cat began to haunt my bird feeders. It usually came from the woodlot beyond the brook, taking cover under the hemlock hedge and making its stealthy way to a position where it menaced ground feeding birds. We did all we could to discourage our visitor, but the moment our attention was diverted it would return.

The jays finally discovered the prowler and set about to evict it. When they saw it near the feeders they would set up such a clamor that the cat would slink away. One yew had branches that reached the ground. Here the animal was hidden and protected from above. Tiring of the racket, we would send it scampering. The second time we routed it, the jays took up the chase. At first they were content to fly above it, screaming and taunting until it found safety in the woods.

But in a short time, mere following was not enough. They would swoop down and attack, using their dagger-like bills with effectiveness. Several times I saw them lift tufts of fur while the cat leaped high, trying to catch its tormentors even as it retreated. In a very short time the cat found our backyard unhealthy and discontinued its visits.

For all its boisterous behavior, the jay is a model of domestic felicity. It is secretive, hiding its nest with much cunning, generally in dense evergreens. It approaches the nest by a circuitous route and leaves with the air of a fugitive, yet if its nest or nestlings are threatened it is a determined defender. I once saw a pair of jays attack a robber blackbird with such fury that it left behind considerable plumage and seemed glad to escape with its life.

All in all, the jay, regardless of his roguery, is interesting, animated and beautiful. In the coldest winter it adds a touch of color to an otherwise chill landscape.

### Select Group

In deer country, a few hunters score consistently, season after season. One of my neighbors belongs to this select group. Some of his trophies are well above average. Because he is a good friend he shared his secret.

He hunts the east side of a certain long ridge. At the lower end of this ridge is a wide valley where the edges of a stream have grown up into massive thickets. From the ridge above a few small openings are visible. My friend has several stands that overlook these openings. He scouts the area thoroughly and takes account of the best bucks and the areas they frequent. When the season opens, he selects a stand and waits. Deer sneak into these thickets to hide. Always the telltale jays are present. My friend, with a twinkle in his gray eyes, grins. "I listen for the jays to tell me where the deer are," he says. "Sooner or later, they move a buck through one of the openings. No sweat."



# A Seed Is Sown

By Bob Mitchell

Assistant Editor  
GAME NEWS

**N**INETY YEARS AGO the Pennsylvania Game Commission was created by the General Assembly to protect and restore dwindling game populations. Since 1895, however, the agency has accomplished far more than just reestablish our deer, bear, turkey, beaver and other wildlife populations. We have grown into a highly diverse and specialized natural resource agency, charged with a wide variety of responsibilities designed to protect our natural environment from the myriad pressures caused by a growing and affluent society. Many of these responsibilities deal with habitat protection and development, and are handled administratively through the Commission's Bureau of Land Management. For the most part, these important aspects of the Game Commission's modern day operations go unnoticed by the public. Therefore, in this and subsequent articles, the responsibilities of the Bureau of Land Management, and the methods by which it serves wildlife, sportsmen and all commonwealth citizens, will be explored.

As the 19th century drew to a close, Pennsylvania was evolving into a highly industrialized state. To fuel the state's growing industries, many large-scale timbering operations sprang up, and Pennsylvania became the lumbering capital of the world. At that time forest science was nonexistent. No thought was given to maintaining sustained yields by cutting on longterm rotation

**DR. JOSEPH KALBFUS, who succeeded Dr. B.H. Warren to become the second Commission Secretary, led the fledgling agency during its early years and helped establish the basic principles upon which the Game Commission still operates.**

*JULY, 1985*

schedules. Timber operators cut anything and everything as quickly and economically as possible, and then moved on. It's hard to imagine how the state's landscape appeared after such extensive and widespread cuttings. Whole mountains were left barren. Not a tree could be seen in any direction. Only slashings and stumps remained, and they were usually burned. Ghost towns still found in secluded parts of the state are mute reminders of that booming time.

The rapid and extensive cuttings were costly. Wildlife suffered. Deer, bear and turkeys perished as their forest homes disappeared. The passenger pigeon already had been reduced to the point it no longer attracted attention from hunters. Eventually it became extinct. Beaver vanished from the state. Turkeys existed only in remote south-central mountains here. Other game

## PIONEER WILDLIFE PROTECTOR



**DR. JOSEPH KALBFUS**  
1852 — 1919

FRONTIERSMAN NATURE LOVER : PUBLIC SERVANT  
LAWYER DENTIST

HE LED IN THE EARLY MOVEMENT TO ESTABLISH A PUBLIC AGENCY TO CONSERVE AND RESTORE PENNSYLVANIA'S WILDLIFE RESOURCES FOR THE ENJOYMENT OF THE CITIZENS OF THE COMMONWEALTH. THROUGH HIS RESOURCEFULNESS, UNDAUNTED COURAGE, AND TIRELESS ENERGY AS SECRETARY AND CHIEF PROTECTOR OF THE PENNSYLVANIA GAME COMMISSION FROM JULY 1898 TO AUGUST 1919, HE OVERCAME ALMOST INSURMOUNTABLE OBSTACLES, AROUSED PUBLIC OPINION AND HELPED TO BLAZE THE TRAIL FOR A LASTING WILDLIFE RESTORATION POLICY. KILLED AUGUST 10, 1919, WHILE IN PERFORMANCE OF HIS DUTY, AT A RAILROAD CROSSING IN WARREN COUNTY. IN THE WORDS OF HIS FAVORITE POEM HE WAS TRULY  
" ONE WHO LOVED HIS FELLOW MEN "

ERECTED 1940 BY THE SPORTSMEN OF PENNSYLVANIA

was found only in isolated pockets which had escaped the loggers. Game that survived their saws and axes was hunted relentlessly. Laws at that time were ineffective and unenforceable. Market hunters, using nets, snares, set-guns, pitfalls and wide variety of other devices and techniques, strove to fill food demands in the growing cities.

Wildlife was imperiled in 1890 when H. A. Penrose, a manufacturer of clay targets and traps, met with members of several shooting clubs to discuss ways to protect and bring back dwindling game populations. This small group of shooters and hunters organized as the Pennsylvania State Sportsmen's Association. These men could not have known it at the time, but establishment of their association represented the birth of conservation in Pennsylvania.

It took five years of PSSA lobbying in the General Assembly before legislation was enacted authorizing a six-member Board of Game Commissioners.

In 1896 Governor Daniel Hastings appointed William Kennedy, Allegheny; Charles Heebner, Philadelphia; Irving A. Stearns, Wilkes-Barre; James H. Warden, Harrisburg; E. B. Westfall, Williamsport; and Coleman K. Sober of Lewisburg to this board.

### A Place To Live

While the Commission's initial efforts were directed toward promotion and enforcement of laws protecting remaining game populations, the charter Game Commissioners also soon realized that aggressive law enforcement was not enough. Wildlife needed a place to live.

In 1899, John M. Phillips, who was to become Kennedy's successor as Commissioner, was hunting in Wyoming when a grizzly bear he and his hunting party had followed for days slipped into Yellowstone Park where hunting was not permitted. The guide allegedly remarked, "That bear has gone into God's pocket, where he knows he's safe."

Phillips became so inspired with this notion that, on his return to Pennsyl-

vania, he immediately began campaigning for a program to have "God's pockets" established in the Keystone State.

It was a frustrating struggle for the fledgling agency. Not until May 11, 1905, was legislation enacted to authorize the creation of game preserves. These preserves, later called refuges, were to be established on State Forests—public lands administered by the State Forest Commission. The first preserve was established in Clinton County, twelve miles south of Renovo, in an area where Commission Secretary Dr. Joseph Kalbfus, Commissioner Penrose and other officials often hunted. This area was selected so these administrators could evaluate personally the success of this new program.

Two more refuges were established in 1906, one in Clearfield County, the other in Franklin. Each covered more than 3,000 acres, was surrounded by a single strand of No. 9 wire, and was bordered by an 8-10 foot clear strip. Trespassing was not permitted on a refuge, but public hunting was allowed on surrounding land.

In 1911, new legislation further defined refuge specifications. A refuge could not exceed 9 miles in circumference, be located within 25 miles of another, be greater than 10 miles in any direction, or comprise more than half of the State Forest in which it was located. Each had to be clearly posted with the words "State Game Refuge; Public Hunting Is Unlawful."

The agency was 16 years old at this point and had accomplished much in terms of developing laws, regulations and programs to protect wildlife. Meager appropriations, however, prohibited the agency from implementing its programs on a statewide basis. When the State Legislature created the Board of Game Commissioners, a two-year appropriation of \$800 was provided to cover "postage and other expenses." Subsequent biennial appropriations were greater, but by 1913 they had reached a high of only \$97,400.

Significant emphasis was added to



Pennsylvania's wildlife management program in 1913, when the Game Commission received legislative authority to sell hunting licenses and deposit the money in a Game Fund for the Commission's exclusive use. The first hunting license cost \$1. That year, 305,028 were sold, and after issuing fees were deducted, the Commission had \$282,981 in new operating funds.

Now supplied for the first time with substantial finances, the agency was able to create seven more refuges in only two years, making a total of ten. They totaled 21,640 acres. Despite indications the refuges were benefitting only deer, not turkeys and small game, the program was so well received by sportsmen that they soon were asking for more refuges throughout the state. At that time, refuges could be established only on State Forest Land, but in 1915 the Legislature gave the Commission authority to lease private lands for this purpose. Under terms of these private land leases, the agency was liable for all property taxes.

Four tracts totalling 34,630 acres were immediately leased, and two more soon followed. Of 47,684 acres on six tracts, 14,140 were set aside as refuges.

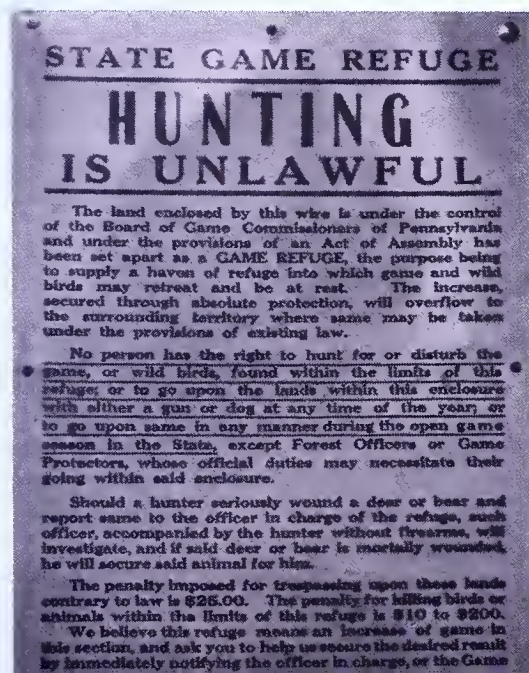
The remaining 33,544 were open to public hunting.

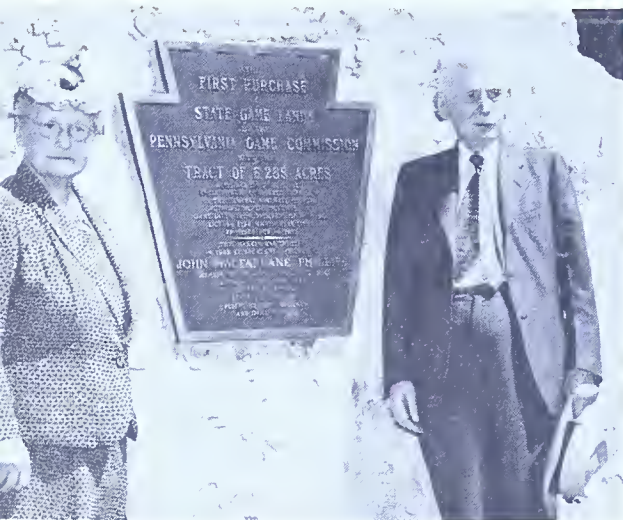
For the next several years the Commission continued to experiment with the refuge system. Problems of one sort or another developed often. In at least one instance, an individual posted land surrounding a refuge—a blatant violation of the lease terms. Some landowners leased their lands for refuges until game populations built up, then terminated—leaving themselves with well-stocked private hunting grounds. It became apparent something more permanent was essential.

Again, help came from the Legislature. On June 20, 1919, the Game Commission received authorization to purchase land. Under terms of this major legislation, the Commission could pay up to \$10 per acre. However, if buildings and/or cultivated lands were part of a purchase and deemed necessary for management purposes, the Commission could pay more. The agency was authorized to pay \$100,000 for land acquisition in the first year, and up to \$50,000 annually in subsequent years.

The Commission decided to emphasize the acquisition of land west of the

**PROVIDING game with a place to live was one of the agency's first objectives. Early attempts included the establishment of refuges on State Forest Land and, later, on private land.**





**A MONUMENT** commemorating John Phillips' relentless efforts to provide game sanctuaries and public hunting grounds was erected in 1948 on the first State Game Lands acquisition.

Alleghenies, where the need for refuges and public hunting grounds was greatest. Commissioner Phillips, who lived in that part of the state, was asked to locate and negotiate for suitable tracts.

In slightly over three months, Phillips tentatively agreed to purchase several tracts of 5,000 to 10,000 acres each, at a cost not to exceed \$2.50 per acre. Some property owners balked at the initial proposal, causing the Commission to raise its offer slightly.

Almost exactly a year later, on June 15, 1920, the Commission finally consummated its first purchase, 6289 acres in Elk County, obtained from Wright Chemical Company for \$2.75 per acre. There were 24 refuges at that time, so this first purchase became State Game Lands 25. In 1948, a memorial to Commissioner Phillips' dedication to the development of public hunting grounds was erected on this historic site.

By 1927, the Commission had acquired twelve tracts in fourteen counties. They totalled 92,641 acres and cost \$323,000 (about \$3.50 per acre) including surveying, title searches and other acquisition-associated costs. There must have been a great deal of excitement associated with land acquisition at that time because, in 1926, sportsmen proposed an increase in hunting license fees so more land could be purchased.

Responding to that support, in 1927 the Legislature nearly doubled resident license fees—from \$1.25 to \$2. (A 25¢

increase had been enacted in 1923 to cover printing costs and incidentals.) The 75¢ increase was earmarked specifically for land acquisition, by lease or purchase, and maintenance of public hunting grounds and game refuges. The increase provided \$376,216 in 1927 and \$328,295 in 1928.

The 75¢ fund, as it was known, gave new impetus to the Commission's land acquisition and management efforts. By 1936, the number of State Game Lands had increased from 12 to 100, totaling 507,406 acres. At least one Game Lands was located in each of 52 counties. These acquisitions undoubtedly exceeded the early goals of the men who first fought for wildlife conservation in Pennsylvania. In roughly four decades, the Game Commission had matured from a dream in the minds of a small group of sportsmen into an agency managing and protecting wildlife, not only on a half-million of its own acres, but also on 48 refuges of state and private lands, and on 63 auxiliary refuges. Including four game farms, the Commission was responsible for 215 management units comprising 627,824 acres.

A refuge keeper was normally assigned to each management unit. Keepers lived in Commission-owned houses, often far from civilization. Each was responsible for patrolling the refuge; maintaining boundary wires; keeping borders cleared; guarding against fires; enforcing game, fish and forestry laws; feeding game; hunting predators, and conducting plantings and other habitat work. But, as land acquisition increased, it became apparent a refuge keeper in each management unit was impractical and unnecessary. Also, research indicated land acquisition efforts were not meeting all the needs of wildlife and the state's sportsmen. So, in 1936, the agency instituted a policy



**REFUGE** keepers lived in Commission-owned houses, often far from civilization. Each was responsible for a wide variety of tasks relating to wildlife protection and law enforcement.

change to better develop and manage the growing network of lands under its jurisdiction.

Under this new policy the purchase of primarily forested tracts was curtailed. More emphasis was placed on obtaining marginal and submarginal farmlands. As the agency had been obtaining lands at a rate faster than they could be developed and managed, it was decided to use a smaller portion of the 75¢ fund for acquisition, and a larger portion for development and management. Inasmuch as larger refuges apparently were of most benefit to deer, it was decided to create smaller ones to better provide for turkeys and small game. To more efficiently manage Game Lands and refuges, the agency stopped assigning a refuge keeper to each unit. Instead, the Commission divided the state into 44 management units and placed a land manager in charge of each. Finally, to expand agency programs into areas near major metropolitan areas, where acquisitions were most difficult to obtain, the Commission adopted the Farm-Game Cooperative program—a form of leasing whereby cooperating land-owners receive various forms of compensation for permitting public hunting on their properties.

This policy change enabled the agency to develop and implement habitat improvement projects more beneficial to wildlife and sportsmen, but land acquisition was nearly brought to a halt. However, as fortune would have it, help came in 1938 with passage of the Federal Aid in Wildlife Restoration Act. This legislation, popularly known as the Pittman-Robertson Act, authorized a 10 percent excise tax on sporting arms and ammunition (since raised to 11 percent on some items). Money from this fund is distributed to the states for approved



wildlife restoration projects. Pittman-Robertson reimbursements pumped new life into the Commission's land acquisition program. From 1938 through 1943, the Game Commission purchased another 123,680 acres at a cost of \$572,000—75 percent financed with PR funds.

With the new policy in operation, and substantial reimbursement provided through the Pittman-Robertson Fund, in the period from 1938 through 1948, land for 94 additional Game Lands was purchased, bringing to 876,203 the total number of acres then owned by the Commission. And again, the Commission found itself in the position of not being able to effectively develop and manage these many holdings.

### More Adjustments

Therefore, in 1949, goals and operating guidelines were once more adjusted to meet current demands. Resident hunting fees were raised to \$3.15, with \$1.25 earmarked for improving, planting, and maintaining wildlife habitat on lands open to public hunting, for purchase and maintenance of equipment, and to finance increased wildlife habitat management and law enforcement efforts on Farm-Game cooperators' properties.

Attendant with this license increase, the 75¢ fund, which had been so instrumental in launching the Game Commission on a rapid and aggressive land acquisition course, was eliminated. It's safe to assume that never again will land be so available and



HUNTERS soon enjoyed the fruits of the Game Commission's efforts. In 1929 a resident hunting license cost \$2, and 505,103 were sold. That year hunters harvested 22,822 deer and 447 bear.

The foresight, dedication and perseverance of the people who founded the agency, and who established the basic principles upon which the Pennsylvania Game Commission grew and still thrives, have given today's sportsmen something to cherish, and protect and be proud of.

Today the Pennsylvania Game Commission owns 276 tracts, totalling 1,290,282 acres. The agency also manages wildlife on another 4½ million acres of private land.

In an upcoming article, the administrative structure of the Bureau of Land Management will be outlined. In following months, the bureau's operating procedures will be further explored, with emphasis on how they are designed to manage and protect wildlife habitat and provide ample hunting opportunities for the state's sportsmen.

affordable as it was in the 1930s and '40s. Many of today's sportsmen learned to hunt on Game Lands and leased properties near their homes. Some take for granted this extensive network of public hunting grounds, and the wildlife it provides. Those who have hunted in other states, however, recognize that Pennsylvania's land acquisition and management program is second to none. Progress made during the last 66 years is legend.

NEARLY 180 registered bidders, mostly taxidermists and fur dealers, participated in the Game Commission's first statewide public fur auction last spring. A total of \$20,935 was collected from the sale of confiscated and salvaged roadkilled animals acquired by state and federal wildlife officers over the past year. The 191 frozen bear carcasses sold for an average of \$41.90 each; 85 beaver pelts averaged \$9.12, while 12 beaver carcasses averaged \$24.79. Nine gray foxes brought \$19.44 each, 16 red foxes, \$9.69. The 262 deer hides sold for an average of \$2.64. Antlers ranged in prices from about a dollar for spikes and small racks to an average of \$51.25 for two 12-points offered. Game Commission officials feel this public auction was a resounding success and already are making plans to conduct another next year.





# Cross-Firing

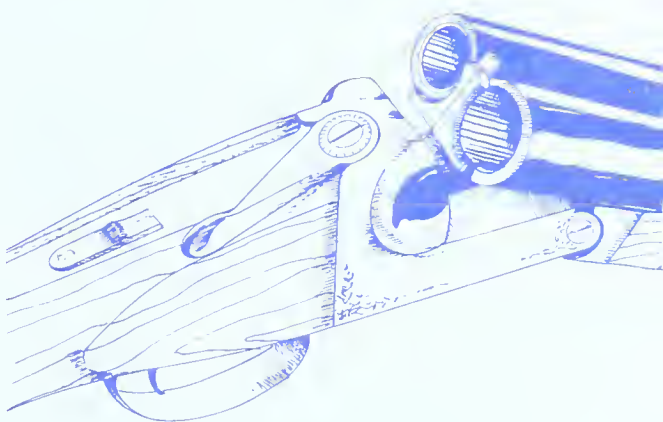
By Bob Latimer

**W**AS STATIONED in Sullivan County as a game protector in the early 1930s. At that time there was a lot of woodcock cover there, quite a lot of birds hatched there, and during the migration more stopped in. Liking to shoot, knowing the covers quite well, plus having the opportunity to take advantage of it — naturally, I enjoyed it a lot!

Was lucky enough at that time to have a real braggin' woodcock dog, a liver and white pointer named Rose. She was in her prime then and truly seemed to know more about woodcock than a woodcock did. Carried her with me almost daily, prior to and throughout the season — we usually knew where to get shooting — or keep going from cover to cover till we did find it. Had lots of visiting firemen for company — those of you who own a good dog know you never have any trouble getting company to hunt with you either. Enjoyed most of them, and they made for some good days too.

## Old Lefever

Was shooting a nice old Lefever 12-gauge with Damascas barrels. It fit me quite well and was open enough for woodcock — but it still had more misses in it than I liked. Had been jockeying around, trying to find something that had all the misses taken out of it. Hadn't been able to, and never did either! Anyhow, one day I stopped at a sporting goods store in Hughesville to visit. This was during the open season. In the gun rack was a nice little Ithaca 16-gauge double that had been traded in recently. It was maybe a grade or two better than a field grade, nice wood and some engraving on it. Had never owned a 16-gauge, but after pointing it around at pictures on the wall, light globes, etc., I thought maybe this was it! Brought my Lefever in and after a



**IN THE GUN RACK** was a nice little Ithaca 16-gauge double that had been traded in recently. It had good wood and some engraving.

little conversation we traded even up.

Could hardly wait to try out the Ithaca. Hunted three or four times with it and found it had more misses in its makeup than my Lefever. I would miss birds that I felt good on — and now and then kill one I didn't think I was on. Had gotten to the point of muttering through my whiskers, but none of it made any sense.

One day Geo. Dieffenderfer and I were hunting a strip of cover along Little Muncy Creek above Lairdsville. A blue wing teal came over and I knocked it down. The creek was high and the duck wasn't dead. It was floating away, so shot at it several times on the water to kill it. Missed it each time. Both loads went about two feet to the side.

By that time Rose had located what all the shooting was about, swam out and retrieved the teal or me. This fiasco caused some conversation. Dieffenderfer was close enough to see me missing the duck on the water. So, shot several times at a stationary object, found the right barrel would shoot about two feet to the left and the left

barrel about the same distance to the right, at normal range. It also proved that had I been pointing the gun right, that teal might have enjoyed the winter in Jamaica!

Had I not shot at this bird on the water and seen where the load was going, it's hard to tell how long I'd have fussed with this gun before I had sense enough to peddle it. Never heard of another gun before or since that did that.

Went back to the place I had traded for it and my old Lefever was in the rack. After I told the owner what I had found out, he very graciously allowed me to trade back again. Don't know where that nice little Ithaca wound up. It was pretty and the owner might have liked it. If he couldn't shoot very well, he might have done well with it—depending on which way the bird was flying and which barrel he was shooting at it.

# Beaver Harvest Hits New High

Pennsylvania's trappers set a new beaver harvest record this year, more than doubling the 1984 figure. A Game Commission compilation shows 7,232 beavers were taken, compared to 3,321 in 1984. The previous record harvest, 7,015, occurred in 1981. The high harvest in 1985 does not necessarily mean that inroads are being made into the normal supply of these aquatic furbearers. High population levels and good trapping conditions produced the record 1985 harvest. Normally, trappers take between 3,500 and 5,000 beavers, mainly depending on weather conditions during the open season. As recently as 1978, the figure was only 1,404. The leading county for beaver pelts this year was Crawford, with a record 1,118. This is only the third time that a single county's annual harvest of flat-tails has topped the 1,000 mark.

## GAME NEWS

Enclosed find check or money order for \$ . . . . . for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW

☐ RENEWAL

\_\_\_\_\_

(Check One)

ACCOUNT NUMBER

In U.S. ☐ 3 Years \$16.50

☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

Name . . . . .

(print plainly)

Address . . . . .

City . . . . . State . . . . .

(Zip Code)

NOTE: All remittances should be made payable to the  
PENNSYLVANIA GAME COMMISSION  
Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
DO NOT SEND CASH  
Please allow 60 days for first copy.



# Hunting Pennsylvania Game With a Canon

By George Sheldon

**I**MAGINE HUNTING Pennsylvania whitetails with a small but powerful hand-held Canon. That's what I do. In fact, I shoot as many as I want, as often as I want, whenever I want. I totally disregard any bag limits, and I don't worry about seasons.

And the game protectors—well, they don't even mind.

It's not that I'm a scofflaw. Rather, my shooting is done with a camera. Nothing is more relaxing for me than taking to the woods and hunting the state's wildlife in this way. The peak moments of these adventurous excursions are captured and saved forever on film.

There's much to be said for hunting Pennsylvania's wildlife with a camera. As mentioned, there's no concern about bag limits or seasons, and it's an activity that can take you outside all year. Just as another reason to be in the woods, it's worthwhile.

Getting started in photo-hunting is easy. But as always, a few precautions should be noted.

If you're planning to take pictures during any regular hunting season, make sure you are wearing lots of fluorescent orange.

Always observe No Trespassing signs, and use commonsense as to where you are walking. Do not try to get exotic shots by climbing cliffs or trees. The danger of injury makes such activities foolish. You'll find good photos available from ground level.

Before going hunting, your equipment must be considered.

I believe the camera should be a 35 millimeter. Small "instant-type" cameras are fine for snapshots, but in my opinion the quality of outdoor photographs taken with them will not



**WITH A CAMERA**, you can hunt all kinds of game all year round, and shoot as much as you like. Sometimes you can even shoot the same animal several times.

measure up to those from a good 35mm.

You should choose a camera with interchangeable lenses. There are many good brands of 35mm cameras available.

Don't be afraid of the camera when you first pick it up. It might have so many gadgets you'll think you will never be able to master it. But that's not so. Today's cameras are designed with the user in mind. Many are almost fully automatic, requiring little more than loading with film and focusing.

- **f stop:** Every lens has a diaphragm, which works much like the iris of the human eye, opening and closing to control the intensity of light passing through the lens to “strike” the film, on which the image is recorded. (On totally automatic cameras, the f stop is

- **Interchangeable Lens:** You will be amazed at the types of lenses, and the prices of the many lenses that will be available for your camera. However, most of those lenses are not designed for the amateur photographer, but rather special applications or professional use. A camera lens has two numbers that are important: its size (expressed in mm) and its f stop.

Look through the view finder and try focusing the camera. Determine how easy or difficult it is to read the focus indicator (usually a split image that has to be aligned). Check out the meter numbers that are found in the view finder. Determine if they are easy to find, and read.



**JUST AS** gun hunters need more than a gun, camera hunters need more than a camera. Besides film, filters, lens cleaning solutions and cloths, extra batteries and pens and notepaper can all come in handy.



Usually, cost is going to be a big factor in making your decision. Shop around before buying any camera. Prices vary tremendously from store to store. Check newspaper ads for sale prices. Don't be in a hurry to buy, and don't be taken in by a fast talking salesman.

The camera you choose will probably have a 50mm lens included with the purchase. Usually the f stop (remember that is only technical talk for how far the lens will open and allow light onto the film) on a 50mm lens will be f1.8. Before purchasing, ask how much more an f1.4 lens would cost with your chosen camera body. It might pay to purchase the higher speed lens (the f1.4) if the cost difference is nominal. This will allow you to take photos in lower light conditions.

The type of lens and the degree to which the camera is "automatic" will be important factors in the price of the equipment.

It's a good idea to buy a 2x extender for your camera. It usually costs around \$30, and at times is worth its weight in gold. A 2x extender will in effect convert your 50mm lens into a 100mm lens. This is an inexpensive way to get a mini-telephoto lens.

The nice thing about 35mm cameras is that you can always add equipment to your outfit when your budget permits. You do not have to buy everything at once.

### Telephoto Lens

But before long, you are going to want a telephoto lens. The best advice, again, is to shop around. There are lots of models, sizes, and styles to consider.

There are two basic types of telephoto: fixed, and adjustable or zoom. Most fixed telephoto lenses found will be 135mm. Not a bad length, and with the 2x extender, you'll have a rather good 270mm lens.

The adjustable telephoto lens will have a range, perhaps from 80mm to 200mm. The length can be adjusted by pulling on the outer ring or by turning a lens. Prices vary widely. The ro-

tating type is more expensive than the pull type. I prefer the former.

An adjustable telephoto lens is more adaptable than a fixed length, though perhaps not quite as good optically.

There are advantages and disadvantages to different lenses. Long lenses are expensive, add weight to your camera, and will not normally work extremely



**THERE ARE many kinds of film, each designed to do a specific job very well with some overlap into other areas. Besides the choice of color or black and white, there is a wide selection in film "speed."**

well in long-distance, low-light situations. The big advantage of telephotos is much better, clearer photos of far-away subjects during daylight.

The differences between the effects of the different lenses can easily be appreciated if you visualize the front of your home. Suppose you want to take a picture of your house from the street. A normal lens will give a conventional photo. Now, remaining in the same location, put on a 135mm lens, and you will get a closeup of something on your house, such as the front door. To get the entire house in the picture with this lens you will have to step backwards. If you were to change the lens again, this time using a wide angle, you would have not only a picture of your entire house, but also of your neighbor's.

The telephoto lens will be used mostly in outdoor photography, primarily because wildlife just won't let



**EVEN WITH high-speed film, camera should be held firmly with both hands as the shutter is released, with camera body pressed against the forehead if convenient. The less camera movement, the better.**

you walk up to within ten feet. A wide angle lens is often used for scenic shots, such as the breathtaking views of Pennsylvania available from the top or side of some of our mountains, or at close quarters, such as within a tent. The normal lens will be used around camp, for shots of your buddies with their trophies, and at your wife's family reunion. (You never thought of using the camera for other than game photography? Tell your wife you want to get some good shots of her family at the next reunion. She'll not only agree to your spending the money for a new camera, she'll probably even drive you to the store and help you choose it!)

You'll need other accessories such as a camera bag, lens cleaners, and a camera strap. Such extras can often be purchased reasonably in discount stores.

After you have your camera, you are almost ready to head to the woods. But first, film must be purchased.

Ask yourself if you want slides or prints. After making that determina-

tion, choose your film. Twelve-, 24-, and 36-exposure rolls are available for prints, and 20- and 36-exposure for slides.

The film will have the ISO or ASA number on the box. For starters, choose a 400 speed film. This is relatively fast film. It's good in the woods because it has extra sensitivity for use in dim light. Most modern cameras (other than the "automatics" mentioned earlier) have built-in exposure meters to determine what f stop and shutter speed should be used for proper exposure. By aligning a needle, or matching lighted dots or going through a similar procedure, depending on your camera, correct settings are easily made. Be sure the ISO (ASA) speed on the exposure meter is set to match the speed of the film in your camera.

Now you are ready to go hunting. When walking through the woods, always have the camera ready. Keep it in your hands. Have the telephoto lens mounted, ready to go.

### Additional Tips

Assuming luck is with you, your film will soon be filled with shots of beautiful Pennsylvania game you'll be proud to show. Here are some additional tips to help you get outstanding photographs:

- Read the instructions packed with your camera—several times.
- Always take time to focus as sharply as possible. Poor pictures are usually the result of out of focus shots.
- Take time to compose your pictures. Almost fill the view finder with your subject. Here is where an adjustable telephoto lens will help.
- Keep backgrounds simple. This is not always easy, working with wildlife, but try to take pictures with uncluttered and simple backgrounds.
- Forget using flash. Use high speed film. Several high speed films are available. They give good shots even in low light conditions. After you are familiar with your chosen equipment, try a box of 1000 speed film.
- Practice, practice, practice! It will



give you a good excuse to get out of the house, away from pending chores and into Pennsylvania's woods more often than you planned. You will become fully competent with your equipment only by becoming totally familiar with it and its capabilities.

- Check equipment before you leave home. Check the battery and the film. Give the lenses and camera a once-over to make certain everything is in order. Clean the lens occasionally. Better to find a problem at home than in the field.

- Shop around for film purchases and processing services. Take advantage of "goof-proof" offers which allow you to return, for credit, bad pictures.

- When learning to use new photography equipment, record the settings of your camera, the shutter speed, f stop, etc., so you can compare your notes with the finished product.

- Consider purchasing a polarizer. This is a special filter that attaches to the lens and is especially useful on hot, hazy days.

- For the best depth of field (objects in focus in both foreground and background), use as high an f stop as possible. (Your camera manual will fully cover this subject. Note the differences between using high and low f stops, and out-of-focus subjects in the sample photos that will be included in your manual. For the best overall focused shot, remember to set the f stop as high as possible.)

- A power winder is another accessory that will make the picture taking process much easier; with it, as soon as you push the shutter button, the film will automatically advance, ready for another picture to be taken.

- We have barely scratched the surface of the subject here. Public libraries have many books which can help you master the photographic art. Help is also free for the asking at any good store where cameras and film are sold.

# *In Memoriam*

**John B. Sedam**

1911-1984

Director, Mineral Economics  
Harrisburg Office  
Retired 1971; 35 years service

**Howard F. Hoffman**

1907-1984

Game Propagator 2  
Loyalsock Game Farm  
Retired 1969; 32 years service

**George E. Sprankle**

1914-1984

Land Manager  
Northeast Division  
Retired 1979; 42½ years service

**Barbara M. Gillespie**

1953-1985

Clerk-Steno 3 Division of Personnel  
Harrisburg Office  
8½ years service

**Elmer D. Simpson**

1909-1985

District Game Protector  
Erie County  
Retired 1971; 30½ years service

Several magazines deal exclusively with photography, and many courses are available at local schools, camera stores, recreation centers, and colleges.

Don't worry if you make mistakes. Go back to the woods and try again. That's the fun and the challenge of photography. And it will give you another excuse to get back in the woods. Soon you will have many favorite photographs that you will want to display.

Shooting Pennsylvania's game with a Canon, a Minolta, a Nikon, Olympus, Pentax or whatever will give you many opportunities to observe one of Pennsylvania's most beautiful natural resources.

Good hunting, and good shooting!

# Unmasking Muskrat Secrets

by Joseph Kosack

THE MUSKRAT has always been a favorite quarry of Pennsylvania's trapping fraternity. Whether young or old, a trapper on a successful muskrat trapline is like a kid in the candy store. He knows each bend of the creek offers new hopes of adventure and mystery as he wades his rat line in the cold dawn air.

I, like many other trappers, got my feet wet in muskrat trapping while attending junior high school. I look back upon those days of misplaced traps and trial and error and smile. Gosh, there was a lot to learn about harvesting what is often referred to as an "easily trapped furbearer."

One of my biggest mistakes as a would-be schoolboy trapper was that I simply had no idea how to judge the population of muskrats in a given area. Because I couldn't, I always expected more from an area than it could ever produce in a given year. Usually, what I figured to be a thriving metropolis of muskrats turned out to be a few very active ones. But as time went on, and I paid my dues, understanding developed.

First off, when you're prospecting for good muskrat trapping territory, you want to get a reasonably accurate count of the active dwellings in an area before you try to determine how many rats are there. Pay no attention to those tracks in the mud, they're only indi-

cators of presence, not of a sizable population. Once you've conducted the den census, use this formula: three muskrats for every bank den (not every hole!), and five for every lodge. Using these guidelines, you should get a fairly accurate total population figure. Figure on trapping 70 percent of this population, leaving the rest for seed. After all, you want to trap the area next year. So be careful and don't be greedy.

Having the proper trapping equipment is also important to the furtaker. As a matter of fact, it would be fair to say that proper equipment enhances productivity in a good trapping area.

Traps, of course, are the most important tool. Unfortunately, most novices don't know which traps are essential. And, a few trappers never learn what is needed.

You can't trap muskrats with only one type of trap. I say this because one type of trap can't handle every situation encountered along the waterway. A conibear can't catch a muskrat at a feedbed, and a conventional foot trap can't hold a muskrat in shallow water areas. It breaks your heart when you have to walk past a good setting location because you don't have the trap needed to fill the order. Therefore, a variety of traps is necessary if you want to be productive.

## Variety Important

Over the past couple of seasons, I've noticed an increasing number of trappers who trap strictly with conibears. I have to admit, I welcome them as competitors. Why? The feeding locations these trappers walk past provide the bulk of my harvest in the winter. As I said, variety is important.

When looking for trap setting locations, always try to uncover the most recently used areas. Sounds obvious, huh? Still, time and time again, I see traps at locations that haven't been visited by muskrats in weeks.

To be sure of a den entrance, the trapper should visit the potential trapping site at daybreak and look in the holes for muddy water. If the brown



cloud is present, it's a safe bet the den is inhabited.

Muskrat feedbeds are probably the most misunderstood sets on the rat line, but they're closely followed by inactive den entrances. An active muskrat feedbed will be overflowing with fresh plant parts. Threesquare, cattail roots and wild rice are their favorites. If the feedbeds are lacking food scraps, they're not in use. So don't kid yourself or try to reduce the load of traps on your back prematurely.

One year I was to trap an area I figured would be full of trappers on opening day. To give myself ample time to string steel in the area, I devised a plan to outwit the competition. I call this the "shell game" tactic, and only the seasoned trapper will get wind of it.

Two days before the season I visited the area and poked my foot into the soft muddy bank, making mock muskrat holes to steer the competition away from the active areas. On Thanksgiving Day, the competitors ran from fake hole to fake hole, setting their traps hurriedly to avoid arriving late at the turkey table. When the last car door

slammed I was still setting traps in the active areas. I made out well that year, although I must admit a few rats fell to those fake den entrances. Still, the action gave me an advantage.

Wire and tangle sticks are important implements for rat trappers who trap with foot traps and like to keep what they catch. In marsh trapping, as a matter of fact, the two can spell the difference between success and failure. Let's take a close look at these two trapping aids and see why they're so vital.

### Wire Most Adaptable

Wire is probably the most adaptable way to fasten rat traps. You can use it as an extension for your trap chain when you want to permit a trapped rat to reach deep water to drown. It's a means to secure a trap when you can't grunt a stake into a rocky creek bed. And it also allows you to set areas that most trappers walk past because they don't know how to set them. Obviously, wire has a purpose on the muskrat trapline. Nevertheless, I've noticed that not more than one out of ten trappers in the marsh realizes the importance of

**WHETHER YOUNG OR OLD, a trapper on a successful muskrat trapline is like a kid in a candy store.**



*Dave Kintzel*



**THE MUSKRAT** has always been a favorite quarry of Pennsylvania's trapping fraternity. Each bend of the creek offers new hopes of adventure and mystery in the cold dawn air.

the metallic strand and uses it. Who knows, maybe it's the best kept secret of successful rat trappers.

Another production enhancer is the tangle stick. It's nothing more than a stick stuck in the mud, but the benefits derived from it, at times, are worth their weight in gold to the water trapper. When using wire, a trapper is always faced with the possibility the trapped critter might not cooperate, and therein lies the concept of the tangle stick. This strategically placed sapling is located in deep water to snare the fleeing muskrat as it instinctively tries to escape by diving. When the wire stops the muskrat's forward movement, it intuitively moves left or right to seek safety. At this time it encounters the tangle stick. The stick acts as a snag for the outstretched wire, and once tangled around the obstacle, the confused muskrat quickly drowns.

Always place the tangle stick so the muskrat can get two or three feet past it (any other distance is too risky). You might want to incorporate two tangle sticks if you're not confident of where the rodent will go once its caught. By all means, do so until you get the hang of it. But bear in mind, this trick isn't

mastered overnight — or in a week.

When setting body-gripping traps, use two sticks to hold the trap in place. Many times, I've noticed where novices, and in some cases trappers with a few years' experience under their belts, have missed a rat simply because it slammed into the side of the trap, pushing it out of the way. If you place one support stick between the jaws of the set trap and another through the coiled spring (fold the spring flat against the wire jaws), the trap will be supported handsomely. A rat can bounce into such a trap all it wants, but the trap won't move. And when it backs up to try it again, you'll bag the rat every time.

Bear in mind, though, that when placing the stick through the jaws, you must keep it above the trigger so it supports only a corner of the square trap.

One of the most overlooked areas along a populated muskrat creek is the overhanging root system. Most trappers avoid them like the plague because to set them requires extra effort or wire. But muskrats like to hang out in these sheltered locations because they know they're relatively safe here from predators.

### Resting Places

Muskrats also use these root systems for resting areas, and in some instances the cavities are part of an undermined travel system in the bank. When I set these areas, I like to add ripped up roots (or whatever the rats are eating) around the trap to magnify my odds of success. This, creates a set that catches muskrats hunting for food, traveling or simply resting.

On the whole, productive muskrat trapping is a combination of tricks of the trade, experience, and high muskrat populations. Without any one of these components, the trapper is bound to carry a light packbasket home.

People think muskrat trapping is easy because the rodents are easy to locate. But anyone who tries to harvest more than a few will quickly find out that, for success, muskrat trapping requires study and work.



# The Vultures of Gettysburg

By Jeffrey B. Roth

**L**OCAL LEGENDS say the first three days of July, 1863, were the hottest the townspeople of Gettysburg could remember.

On July 4, as the residents cautiously returned home, visions of Biblical perdition were replaced with real horror as they surveyed the destruction and carnage left by the bloodiest battle of the American Civil War.

For three days, 150,000 men had fought each other in close quarters. Casualties on both sides were tremendous. Nearly 50,000 men were killed or mortally wounded, and at least 40,000 horses were slaughtered.

The Union and Confederate forces buried their dead in mass, shallow, unmarked graves. The horses were left for the vultures that had been lured by the smell of death.

Soon heavy rains began to fall. They washed the soil away from the graves, exposing the dead to the elements. The bodies rapidly decomposed.

## 6000 Bodies

For six months, the town and surrounding countryside was immersed in the stench of death and decay. The dead outnumbered the living. Bodies were discovered by farmers as they plowed their fields. About 6,000 bodies were found in fields, among the boulders of Little Roundtop, and wedged in the crevices of huge rocks in Devil's Den.

Vultures came by the hundreds from miles around. Some say the smell drew them, while others insist they passed the message of death to one another as they soared on the warm summer thermals.

Today, the sight of the scavengers perched in large numbers in the tall trees that line Hell's Kitchen, Devil's Den, and Little Roundtop in Gettysburg National Military Park are a disturbing reminder of death.

Old-timers claim that vultures can live to be over 100, and that some of these birds were here during the battle. At the very least, they will tell you the vultures of Gettysburg are the direct descendants of those birds that arrived after the battle.

Hal Greenlee, natural resources director for the National Park Service, was skeptical of the legends. He knew the size of the vulture population — both the turkey vulture, *Cathartes aura*, and the black vulture, *Coragyps atratus* — was unusually large. Greenlee searched



**VPI GRADUATE STUDENT Melodie Richmond prepares to take data from vulture trapped near Devil's Den on the Gettysburg National Military Park.**

JULY, 1985



**JOHN COLEMAN, foreground, and assistants search for vulture chicks near Hell's Kitchen. Large boulders and rocky areas in region provide dry and spacious nesting spots for these big birds.**

historical and scientific literature on the vultures. He found more questions than answers. Not much was known about these common birds.

Greenlee wondered if there was any truth to the legends. What was the relationship between the battle and the vultures? What impact did the activities of the park have on the vultures? As resource planner, Greenlee needed to know more about the raptors in order to preserve and manage their habitat within the park.

In 1981, Greenlee assembled eleven scientists and wildlife specialists from Pennsylvania State University School of Forest Resources, Pennsylvania Cooperative Fisheries and Wildlife Research Unit, United States Fish and Wildlife Service Department of Fisheries and Wildlife Science, Virginia Polytechnic Institute State University, and the Eastern National Parks and Monument As-

sociation. All were interested in the vultures. The result of the meeting was funding for a two-year study of the birds.

For the two graduate students who are now finished with their field work on the vultures, the birds became more than the subject of a thesis.

"The birds seem extremely intelligent, much more than I really expected," said John Coleman, a graduate student at VPI. "They respond to each other a great deal and respond to humans in what seems to be an intelligent way. They have a complex system of response and behavior.

"They are not a glamorous species," he went on. "They will vomit if threatened, and they urinate on their feet to keep them cool and clean. "Nevertheless, they are more ecologically important to the environment than the bald eagle."

Coleman and fellow researcher Anthony Wright of Penn State divided their tasks. Wright was responsible for studying the vultures' winter roost. Coleman worked during the summer, capturing, tagging, measuring, and fitting birds with radio transmitters.

### Annual Migration

From December to March, a one-square mile area of the battlefield is invaded by black and turkey vultures. The black vultures annually migrate to Gettysburg from nesting sites along the northern Susquehanna and central Pennsylvania area. Wright spent many cold days and nights counting the birds and analyzing the roost in the densely clustered pine trees of Hell's Kitchen.

"What they seem to like is a number of big pines clustered together, rather than an isolated tree," Wright said.

Ironically, Wright noticed that certain trees attracted large numbers of the birds, and the combined weight of the birds often caused the branch to break, thus destroying their own roost.

"The daily population of the roost varied a lot," he said. "It peaks during January to as high as 900 birds, and stays high until the middle of February.





**BLACK VULTURE**, above, is examined by Richmond and Coleman, right, as they remove tags attached during investigative program. Study was carried out over a two-year period.



Then it drops off rapidly. There is a tendency among the birds to collect in one roost during the worst part of the winter, then, when the temperature ameliorates, they spread out to other roosts used in prior years."

As for the legends, Wright said, "Some biologists suggest that vultures congregate in winter because of the availability of food and for safety from predators. I don't buy that any more than I believe that the birds were drawn here by the battle. I believe they find a place where conditions are favorable to conserve energy — the big evergreens on hills, so they can move out quickly when the weather breaks."

Wright's research indicates that the topography of the battlefield is the drawing card that attracts the birds, and not its history. The turkey vultures are native to the area and might have been present during the battle, but not the black vultures. "They were not here at the time of the battle, unless they came here and then retreated back south again. I think black vultures first appeared in the early 1950s," he said.

Turkey vultures, Wright discovered, were mentioned in an 1890 account of the Park Service's attempts to prevent the birds from roosting on the Culp's Hill observation tower. That was the only historical reference to the vultures anyone could find.

Black vultures migrate greater distances than turkey vultures. Black vultures have recently appeared in Huntingdon County for the first time, an indication, Wright said, that black vultures are expanding their range northward.

"There is no difference in the type of roost chosen by either species of vulture," Wright said, "Black vultures tend to stay more in a group, but you will see turkey vultures mixed in. Their forage range is reduced in winter because of a lack of thermals, so they tend to congregate in areas that have a concentrated food source, near agriculture or wooded areas along roads. They eat a lot of road-killed groundhogs and deer, miscellaneous small animals, dead farm animals, and especially poultry."

"During the height of the avian influenza outbreak," Coleman said, "we captured vultures and tested them for the highly pathogenic strain of the virus. All tests were negative."

Coleman's research focused on the biological and behavioral aspects of vultures. He found many similarities between the two species and some striking



**PLACING VULTURES** in burlap sack made it easy to weigh them. Adult turkey vultures weigh about 4 pounds, black vultures somewhat more.

ing differences. Both birds have an average lifespan of 20 years in captivity, much less in the wild, dispelling the myths about longevity, Coleman said.

Both species feed mainly on dead animals and birds. During times of food shortages, the birds will sometimes turn to cannibalism. Black vultures, the more aggressive of the two birds, have been known to kill sick animals and occasionally baby animals, Coleman said, but those instances are rare. The vulture's claws are not made for killing, but for holding.

Vultures mate for life, using the same nests and roosts year after year. They are territorial birds and stick to the same foraging ranges and migration patterns.

The vultures choose caves or other enclosed areas with two exits for raising their young. They lay two eggs per year and generally hatch two chicks per year. Both parents share in the nurtur-

ing of the chicks for about eighty days.

At maturity, turkey vultures weigh about 4 pounds and have an average wingspan of 5-5½ feet. They are black with white feathers on the breast and around the neck. The coal-black black vultures have an average wingspan at maturity of 4-4½ feet, but actually weigh more.

Black vultures are more social and gregarious than turkey vultures. They also bite, Coleman said. "I wouldn't mess with them. They are not aggressive unless someone or something is aggressive with them — like when you are putting tags or transmitters on them."

Turkey vultures move very little on the ground, while black vultures show agility there and can often be seen preening each other on the ground. Turkey vultures are also loners, compared to the blacks, but occasionally can be seen interacting with another vulture. Both species are hygiene conscious. They often take baths, and spend a great deal of time grooming feathers.

Black vultures bark and hiss, but turkey vultures remain silent cousins. Coleman said the turkey vulture has an incredible sense of smell, while black vultures rely on keen eyesight to locate their meals.

### Great Distances

Vultures can fly up to 30 mph, at an altitude of 5,000 feet, drifting aloft for hours in favorable conditions. Sometimes they travel great distances. Coleman tracked a juvenile black vulture by car from northern Adams County to Winchester, Virginia, a flight of about 100 miles, in seven hours.

Both species have ritualized courtships in the air, and in the case of the black vulture, on the ground as well. Vultures can frequently be seen circling together high in the air.

"When black vultures leave the roost in winter, it reminds me of airplanes leaving a busy airport. First one takes off, then another," Wright said.

The birds share a common relationship with man, especially the farmer.

Nature's caretakers and sanitarians,



as Coleman calls them, often help the farmer. Both he and Wright concluded that farmers often take dead animals to a secluded corner of their fields, instead of burying the carcass or having it hauled away, knowing full well that in a short period of time the carcass will be stripped clean of flesh by the vultures.

While there is a symbiotic relationship of sorts between the vultures and man, Coleman believes man is also the birds' worst enemy.

"Man is the vultures' only predator. The impact of man on these birds through trapping, shooting, and poisoning is fairly significant, but just how significant is hard to determine," Coleman said.

Coleman hopes to identify significant links between man and the effects housing developments have on the mortality rates of vultures.

By analyzing blood samples from eighty birds of the over 200 he has trapped, Coleman hopes to identify common levels of proteins, red blood cell counts, the presence of heavy metals and pesticides, primarily lead and cadmium, and any diseases. Dead birds are autopsied. Coleman said a percentage of the birds brought to him had been shot or killed in a trap.

"What is really important to the future of the birds," Wright said, "is the residential development encroaching upon their habitat at Gettysburg and statewide. If housing or commercial ventures develop in areas where vultures roost, then vultures will become a nuisance and something will have to be done to eliminate them. The most important aspect of my research is to identify how crucial habitat and the roost is to vultures."

Wright suggested that a statewide study could determine if vulture roosts are endangered and whether laws should be passed to protect the roosts.

Coleman also believes further study of the vultures is necessary.

"I would like to see more study devoted to the communal roosting habits of vultures. Why do they roost together?"



Is there communication between the birds? Are there social and hierarchal structures governing the birds and their behavior? How important are vultures to the environment? All of these questions should be answered. We would need another five years of data to get an adequate picture of the birds," Coleman said.

Greenlee would like to see the study continued. He was not satisfied with the researchers' findings on the historical relationship of the birds to the battlefield.

"We were hoping the study would tell us what it is about the park that makes it so attractive to vultures," Greenlee said. "Especially why they congregate in the one-square-mile area of Hell's Kitchen and Devil's Den. We feel that it is the physical area, not the metaphysical properties of the park, that attracts them. We don't believe the birds are sitting here waiting for the next battle."

Greenlee is not optimistic that more money will be granted for another project. He said he would pursue more funding and would continue his own research. He noted that the study has helped to disprove some, but not all, of the legends about the vultures of Gettysburg.

Note: The researchers' vulture project reports are due some time in 1985. Interested persons can obtain information through the Gettysburg National Military Park Service.



**JOHN LASHINSKY**, Newtown Square, has taken a dozen Keystone State bucks, the last of which is this Delaware County 12-pointer.

# Stringtime

**N**OW is the time to begin Practice. Get your equipment in shape. Get advance permission to hunt. Get your body in shape. Practice. Practice. It'll pay off. Practice.



**FRANK BAUREGGER**, above, Erie, poses with the first deer of his archery career, a 125-pound doe. Below is **DOUG SMOKER**, Strasburg, and a Huntingdon County 8-point.



**JOHN SIPE**, McClure, poses on this Mifflin County buck with a bow.



Montgomery County is where **DENNIS DOWNING**, Pottstown, took this 150-pound 5-pointer. White **FRANK OMARA**, below, took this 150-pound 8-point Columbia County.





# Trophies

Preparing for archery season.  
In proper working order. Practice.  
Landowners. Practice. Get  
Scouting for hotspots. Prac-

5-yard shot  
to collect his

**MIKE FUSCO** is posing with his first buck, a 165-pound 7-pointer taken from Allegheny County.



**JOHN LeVAN**, North East, missed this Erie County deer with a 12-foot shot, but went back the next day (the season's last) and did bag this 8-pointer with only 10 minutes remaining until quitting time.



**JOHN KOVAC**, Elizabeth, above, stayed in Allegheny County and dropped this 260-pound 10-point with one shot.



**JOHN PERLA**, Arnot, above, was happy with this 7-point, his first buck. **GREG POTHERING**, below, Neffs, took this 115-pound 6-point from Lehigh County.





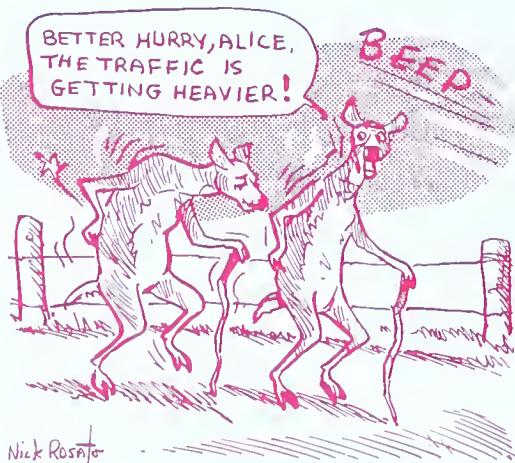


# FIELD NOTES



## A Biased View?

**GREENE COUNTY**—Even in this county with its burgeoning deer population, there are still those who clamor for a moratorium on “doe” hunting. Not only were the roadkills and dogkills way above normal this past winter, but for the first time in several years we had evidence of deer starvation. I suggest those who want to stop antlerless season just take a brief excursion on the back roads of this county. There are lots of deer here. I can only conclude that many of these complainers can’t find deer where they like to hunt. —DGP Stephen A. Kleiner, Waynesburg.



## Hangin' In

**LUZERNE COUNTY**—Biologist Abe Lang recently examined the jawbones I had retrieved from two roadkills in this district. One, he determined, came from a 7½-year-old that I had found to be carrying two embryos, and the other came from a doe between 10 and 15 years of age that was carrying one embryo. We found both of these unusual because most deer in the wild don't live to even 4 years of age. —DGP Edward J. Zindell, Wilkes-Barre.

## Family Affairs

**ADAMS COUNTY**—It's interesting to see how this job as a game protector not only affects every aspect of our lives, but also how we get used to it. For example, at the end of January, things were beginning to slow down. Most of the investigations were wrapped up and I could finally think about spending a little more time with my wife. One evening, because we had not been to a movie for about a year, we decided to sneak away and catch the latest flick. Just as we were leaving, however, I received a call about a skunk. So on the way home from the movie we had to stop and pick up the critter. Being married, it somehow seemed okay, but if we had still been only dating, I doubt that she'd have been impressed. —DGP Larry Haynes, Gettysburg.

## Be Prepared

**LYCOMING COUNTY**—Since my two-year-old daughter Sally has learned to talk, I'm getting a lot of assistance. She makes sure I'm ready to face the public by running down a list of things I should be wearing, such as a game protector tie, game protector shirt, game protector pen, and most importantly, game protector pants. One morning when DGP Marks pulled into the driveway to pick me up, Sally commented to my wife that Dan had a fruit roll-up. My wife was surprised that she could see such a small item until Sally said the fruit roll-up was on the roof of Dan's Bronco. If Sally adds fruit roll-up to her list of game protector things I should have, I guess it will serve as a double reminder to grab a piece of fruit, and to put the red light on my vehicle. —DGP Dennis Dusza, Williamsport.



## Habitat: Works Both Ways

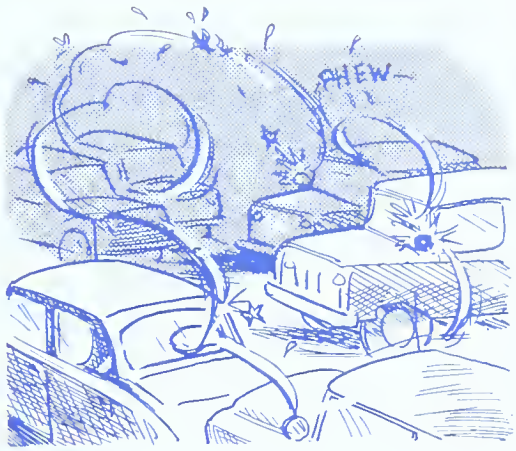
**LEBANON COUNTY**—The solutions to most animal nuisance problems in residential areas can be traced to what is attracting the unwanted animal. Woodpiles are apartments for skunks and rabbits. Feeding domestic pets on the back porch or in the yard also provides an easily obtainable food source for raccoons and skunks, as does putting out unprotected plastic trash bags. If skunks are making divots in the lawn, the best answer is to treat the lawn to eliminate the grubs the skunks are searching for. Keeping vacant lots mowed and free of debris can eliminate habitat. All in all, if you remove wildlife shelter or food, you probably won't be plagued by recurring problems. —DGP Gary W. Smith, Lebanon.

## Just Look

**LYCOMING COUNTY**—I recently spent a day with several officers and other persons erecting wood duck boxes, and building a beaver control device and two osprey nesting platforms—all for the benefit of wildlife. On this particular day we were fortunate enough to see a wide variety of ducks and geese, a beaver, 32 deer, 3 groundhogs, 4 great blue herons, 2 kingfishers, numerous bluebirds, 2 pheasants, an osprey, several red-tailed hawks and many songbirds. It was a good day. —DGP Dan Marks, Proctor.

## Swamped

**SUSQUEHANNA COUNTY**—Game protectors often find the transition associated with changing districts to be difficult, but thanks to some special Fish Commission and Game Commission personnel, sportsmen and local residents, my transfer from Columbia County to this one has been extremely enjoyable. I've already learned two things in the short time I have been here—there is a beaver behind every tree and not enough traps to go around. —DGP Charles J. Arcovitch, Hallstead.

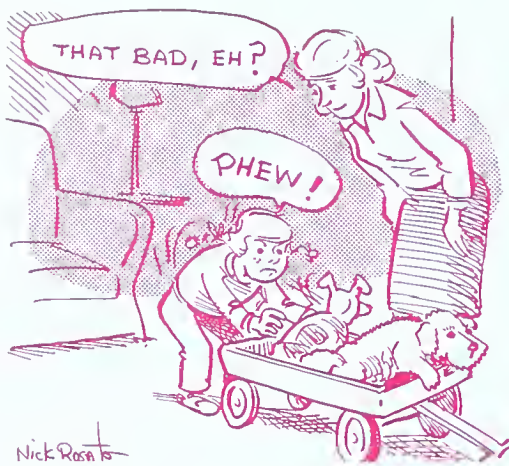


## Overwhelmed

**TIOGA COUNTY**—This past spring a song sparrow established his breeding territory in an area which includes our driveway. Without fail, whenever a vehicle pulled into the driveway, the sparrow attacked his reflection in the sideview mirror. If the vehicle was one with two sideview mirrors, he flew back and forth from one to the other, trying to drive his "competition" away. He finally met his match, however, on a weekend when we were having a party and six vehicles were parked in the driveway. —DGP Steve Gehringer, Mansfield.

## Glad to Help

**CLEARFIELD COUNTY**—Dr. Glen Hughes, wildlife technology professor at Penn State, and I are currently working on a project to create woodcock and grouse habitat in the area. Emphasis will be placed on management techniques that will provide for the regeneration of aspen, a species upon which these game birds rely heavily. One facet of this project is going to be a workshop to demonstrate to landowners how they may improve their lands for these species. If you are interested in improving your property for grouse, woodcock or wildlife in general, contact the Pennsylvania Game Commission for advice. —DGP Jim Neely, Penfield.



### Just Like Dad

**VENANGO COUNTY**—Some time ago my three-year-old daughter Amy went with me to pick up a roadkilled deer. I was surprised to find her interested in the whole operation—including our trip to the deer pit. I didn't realize just how impressed she was, however, until recently. She was picking up her stuffed animals from the floor and putting them in her wagon, and her grandmother asked what she was doing. Amy replied, "Picking up roadkills."—DGP Len Hribar, Oil City.

### Won't Give 'Em Up

**WAYNE COUNTY**—Did you ever wonder if all the big bucks shed their antlers before deer season arrives? While it does happen occasionally, John Gibbons, Hawley, took a picture of a beautiful 11-pointer February 21.—DGP Donald R. Schauer, Honesdale.

### Relaxed

**CLINTON COUNTY**—Last spring I made frequent observations of a mature bald eagle at the Alvin Bush Dam, and found it especially interesting that the wild ducks inhabiting the area did not perceive the eagle as a threat. These ducks would often swim in proximity to this majestic bird. The eagle paid no attention to the waterfowl, but instead concentrated on fish that he could deftly snatch from the dam at will.—DGP John Wasserman, Renovo.

### Never Taken Lightly

**WESTMORELAND COUNTY**—To those who think a wildlife officer's job is not dangerous, I'd like to report that in 1984 three conservation officers paid the ultimate price while protecting their state's wildlife resources. Killed in the line of duty were Terry Hoffer, Washington; Jimmie Wood, Mississippi, and Margaret Park, Florida. Statistically, conservation officers have twice the chance of being assaulted in the performance of their duties as regular law enforcement officers.—DGP R. D. Hixson, Ligonier.

### Right Away

**McKEAN COUNTY**—The Boy Scout Troops of Hazelhurst and Mt. Jewett recently invited me to show slides of native plants and animals found in the county. After the program, the questions showed the scouts have as keen an interest and knowledge about the outdoors as many adult groups. When the meeting was over, several scouts told me they'd be waiting to read about this program in **GAME NEWS**. Well fellas, here it is.—DGP John Dzemyan, Smethport.



### Procrastinating Phil

Before sunrise on March 15, when it was 20 degrees and snow was swirling all around, I noticed a woodchuck sitting on his snow covered burrow. I wondered if he was thinking about Phil's prediction, six weeks earlier.—LMO Dave Brown, Westfield.



## If It's Not One Thing . . .

**SNYDER COUNTY**—While hunting arrowheads one day in March, John Miller and his son came across an injured great horned owl. It had somehow punctured his bottom beak with its talon, and was unable to free it. John brought the owl to my home where I was able to free the talon with a pair of pliers. Once freed from his own deadly hold, the owl flew to a nearby tree—where he was immediately mobbed by a flock of crows. —DGP John Roller, Beavertown.

## Future Interests

**MONTOUR & NORTHERN NORTHUMBERLAND COUNTY**—In the three years I've been a game protector, the question most often asked of me has been to define what a game protector is. Consequently, I've given the question a great deal of thought. I've decided that in essence a game protector is a member of a small select group entrusted with the enormous task of preserving what remains of our natural resources so that our children's children may have the opportunity to experience what we have come to take for granted. —DGP Daniel I. Clark, Potts Grove.

## Important Encounters

Those of us who regularly wear a uniform are often approached when seen in public. I have noticed a dramatic increase in the frequency of these encounters since the announcement of our proposed hunting license cost increase. And although lengthy discussions often cut deeply into an already tight schedule, I usually accommodate the questioner, as these one-on-one sessions are almost always worthwhile for everybody. I've found most of these people to be congenial and very eager to learn about our work. —LMO Jerry Becker, DuBois.

## The Real Answer

It's amazing how many people still think stocking is the way to increasing rabbit populations. Habitat, however—low dense cover with adequate grasses and legumes nearby—is the answer. Provide the proper habitat and you'll find rabbits. In fact, you won't be able to keep them away. —LMS Barry D. Jones, New Ringgold.



## If You Say So

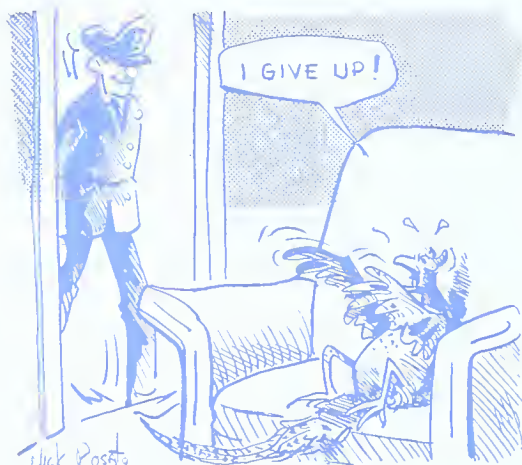
**ERIE COUNTY**—At supper one night a good friend of mine complained about the meat being tough. He asked his wife where she got the meat. She started to explain in which freezer, the size of the package and its wrapping, but before she could finish he shouted that she had cooked a fox he'd cut up for bait. This friend (at least he was till this appeared) is a taxidermist and trapper who has several freezers full of supplies and specimens. P.S. — For those of you who might have wondered what fox tastes like—it was good, but tough. —DGP Wayne Lugaila, Waterford.

## Year-Round Use

Last month we reported in Field Notes that several screech owls were using the wood duck nesting boxes in the winter. We discovered this spring a number of peacefully slumbering flying squirrels in our bird houses. —LM W. J. Lockett, Perkasio.

## Losing Ground

For three days at a training conference in March the land management personnel heard about the importance of wetlands and what can and will be done to protect them. After digesting all the information presented, I found myself wishing everyone in Pennsylvania could have learned about the extreme value of wetlands and the problems we're facing because of their rapid demise throughout the United States. We have already lost much more than we can ever save, but we can still protect much of what is left if only we can educate more people as we have just been educated. — LMO R. B. Belding, Waynesburg.



## Just a Warning

**MONTGOMERY COUNTY**—Cheltenham Township Police Officer Jerry Starosta recently responded to a tripped burglar alarm at a local residence. As he cautiously approached the house he noticed the intruder had broken a window to gain entrance. Inside, the house was a mess. Shattered vases and plants littered the tiled floors. Suddenly he saw him. Hiding behind a chair was the culprit that caused the whole mess. A stunned and disoriented ring-necked pheasant stumbled into a chair and was immediately arrested—but only long enough to regain his senses, at which time he was promptly released. — DGP William Wasserman, Montgomeryville.

## Where'd They Go

**TIOGA COUNTY**—Rockview Penitentiary, near State College, has farming and forestry operations where about 30 inmates raise beef cattle and harvest timber in the woodlots. A few of us got acquainted with some of the inmates there while we were attempting to trap turkeys. They were quite interested in our work, especially because they had been seeing a lot of turkeys close to their quarters and their dining hall. I told them that if they heard a loud bang it was us shooting a net over some turkeys. Near meal time one evening, turkeys came to the bait and we shot the net. We then ran down through the woods and crossed a creek to where the turkeys were caught. While holding the net down, I looked around to see about twenty inmates standing, watching us work. I don't know what the cook thought, but we sure emptied the chow hall in a hurry. — DGP Frank Bernstein, Middlebury Center.

## Did He?

**INDIANA COUNTY**—Deputy Jay Burns' wife Vera recently received a call that amused them both. The caller said he knew Jay got around a lot and was wondering if Jay might know of someone who had a potbellied stove for sale. At first, this seemed an unlikely question for a deputy game protector, but then, after all, a lot of good hunting stories get swapped around a potbellied stove. Right?—DGP Mel Schake, Indiana.

## Off to a good Start

**NORTHAMPTON COUNTY**—Not everybody finds it impossible to locate a buck during deer season. Willard H. Beers, Walnutport, for example, is 73 years old and started hunting small game with his father in 1923. He's done okay too, for last year he killed his 50th buck in Pennsylvania. We hope you enjoy your sport for many seasons yet to come, Willard. — DGP Richard W. Anderson, Nazareth.



# Goose Blind Applications

**A**PPPLICATIONS for hunting from goose blinds at the Pennsylvania Game Commission's two controlled hunting areas at Pymatuning and Middle Creek will be accepted from September 1 through September 20.

Hunters are permitted to apply to only one of the two areas. If a person applies to both areas, that person will not be eligible to hunt on either.

A hunter will be permitted only one hunting trip to a controlled goose shooting area. If a person hunts geese on one area, that person will not be eligible to return to that facility as a hunter this year, and that person will not be eligible to hunt on the other controlled goose shooting area in 1985.

Drawings will be held by the Game Commission at Pymatuning and Middle Creek in late September to select blind holders for both controlled shooting areas.

## Three Guests

A reservation will entitle the applicant to bring not more than three guests. The guests must be present to register.

At Middle Creek, there will be four shooting days each week of the season, on Mondays, Tuesdays, Thursdays and Saturdays. Shooting at Pymatuning will also take place on four days, but on Mondays, Wednesdays, Fridays, and Saturdays.

Applications for goose blinds at Middle Creek and Pymatuning are a part of the 1985-86 Hunting Digest supplied with the hunting license. To apply, a hunter simply fills out the application and then mails it to the management area of his or her choice.

The official application form printed in the Digest must be used.

Pymatuning applications must be submitted to the Pennsylvania Game Commission, Pymatuning Wildlife Management Area, RD 1, Hartstown, PA 16131, and Middle Creek applications to the Pennsylvania Game Commission, Middle Creek Wildlife Management Area, RD 1, Newmanstown, PA 17073.

The applicant's 1985-86 hunting license number, including the letter, must be listed on the application. Applications must be received no earlier than September 1 but not later than September 20; if the application is received earlier than September 1 or later than September 20, the application will be rejected.

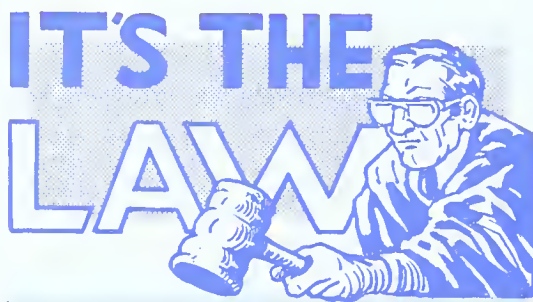
## Not Transferrable

Only successful applicants, as determined in the drawings, will be notified. Reservations are not transferable.

The successful applicant whose name appears on the Pymatuning reservation must present the reservation in person at the Pymatuning Wildlife Management Area headquarters (registration building) located on Legislative Route 20006 between Hartstown and Linesville about four miles north of Hartstown, and Middle Creek reservations must be presented at the Middle Creek Wildlife Management Area visitors center on Hopeland Road about two miles south of Kleinfeltersville.

Hunters should arrive at least one hour before shooting time to allow for the issuance of permits. All reservations for any one day will be valid only up to one-half hour before shooting time on the specified day.





### Question

Does a Game Protector or a Deputy Game Protector need the assistance of a policeman to stop a car?

### Answer

No. The Game Law gives either one the power and authority to stop vehicles when in uniform.

A federal migratory bird hunting stamp (duck stamp) is required to hunt geese and ducks. 1985-86 hunting licenses and duck stamps must be presented at the check station.

Only one official application per person may be submitted. Anyone submitting more than one application for a reservation will have all applications rejected. Further, individuals filing more than one application or hunting more than one time per season on a controlled goose hunting area in the state will be denied the privilege of hunting on these areas for three years.

Provisions have been made at both Middle Creek and Pymatuning to accommodate handicapped persons.

Shooting hours for the controlled goose hunting area at Pymatuning are from one-half hour before sunrise until noon. On the Middle Creek controlled area, shooting hours are from one-half hour before sunrise until 1:30 p.m. Hunting starts at 9 a.m. at Pymatuning on November 2. There is no hunting

from goose blinds at Middle Creek on November 2.

In addition to the goose hunting area, there are also two controlled duck shooting areas at Pymatuning. Fifty hunters can be accommodated at a time in each of these two areas.

Shooting days for the Pymatuning duck areas are also Mondays, Wednesdays, Fridays and Saturdays, and duck area shooting hours are the same as for the goose area. While these duck areas are controlled shooting sections, there are no advance reservations.

A drawing is held each morning to determine the 100 hunters who will qualify for that day. Those using the duck areas must check in at the registration building.

This year there will again be four duck shooting blinds at Middle Creek, with a drawing each shooting day to determine the winners of these blinds. A hunter may take a goose from a Middle Creek duck blind; however, a hunter is limited to one goose per year from the controlled shooting section at Middle Creek.

A hunter is also limited to one goose per year on the controlled goose hunting area at Pymatuning.

Ducks may be taken by hunters using the goose blinds at both Middle Creek and Pymatuning, within other existing federal and state regulations for waterfowl.

Waterfowl hunters are required to use steel shot at Middle Creek and Pymatuning.

Hunters are reminded that the 1985 waterfowl seasons will not be established until late August or early September, after the federal government draws up its framework. Waterfowlers are urged to wait until Pennsylvania seasons are announced before submitting their blind applications to Pymatuning or Middle Creek.



**"Species of Special Concern in Pennsylvania"** describes 297 plants, insects, birds, fish, amphibians, reptiles and mammals now in danger in our state, and recommends procedures to combat their threats. The baby river otter held by DER Secretary Nicholas DeBenedictis as PGC Director Peter Duncan and PFC Director Ralph Abele look on, is one of the vulnerable species. The 430-page volume is available from: Publications Secretary, Carnegie Museum, 4400 Forbes Ave., Pittsburgh, Pa. 15213 for \$33 delivered.



## 4.25 Million Seedlings

Wildlife will soon benefit from over 4.25 million tree and shrub seedlings being planted throughout the state to improve habitat. The seedlings were produced at the Game Commission's Howard Nursery. More than half are being planted by Game Commission personnel on State Game Lands, and on Forest-Game, Farm-Game, and Safety Zone projects, where public hunting is permitted by private landowners. About a half-million seedlings are being sold, at minimal cost, to individuals through the Planting for Wildlife program. In addition, sportsmen's groups, special research projects, conservation clubs, soil and water conservation districts, coal stripping operators and others receive seedlings, which provide wildlife food and cover on lands open to public hunting.

## Conservation School Workshop

A County Conservation School Directors Workshop will be held at the Best Western Motel, Carlisle, on September 20-21. The workshop will be conducted by Pennsylvania State University and Pennsylvania Federation of Sportsmen's Clubs. It will provide participants with the leadership training and skills required to develop and conduct successful conservation schools; explain how to develop a curriculum; tell what physical and natural resources are needed, and show how to assemble and manage an organizational team. For further information, contact Harry V. Weaverling, Penn State University, 109 Grange Bldg., University Park, PA 16802. Phone: (814) 865-3443.

## Thoughts While Walking

*Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men of talent. Genius will not . . . the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan "press on" has solved and always will solve the problems of the human race.*

— Calvin Coolidge

## Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Douth, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

### Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER PATCH .....	\$ 3.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

### Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

### Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 by Ned Smith) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

### SPORT Items

_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

### GAME NEWS

_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 5.00
-------	--	---------

### Waterfowl Management Stamps (Voluntary)

_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

DO NOT SEND CASH

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



# young artists page



**Chipmunk**  
**Kelly Skarbek**  
**Punxsutawney**  
**Punxsutawney Junior High**  
**7th Grade**



**"Mollie"**  
**Alice Bagshaw**  
**Gap**  
**Pequea Valley High School**  
**12th Grade**

# Why Don't You Come Camping?

“WHY DON'T you come with us this weekend? We're going camping.”

Behind that simple invitation is a multitude of possibilities. After all, just what is “camping”? Are we going to sleep on pine boughs and eat pemmican or will we be dressing for dinner? The truth is, camping spans conditions from the primitive, as in “You'd have to be a caveman to enjoy this!”, to a vacation lodge that costs more than most homes.

However, there are some constants. If you're invited to camp, chances are you'll be sleeping in the same room with (a) mice, (b) spiders or (c) someone who snores, or (d) all of the above. Most likely it will be (d). You'll gain weight as well. Despite the fresh air and exercise, no one ever loses weight on a camping trip. If you wonder why, consider this: When was the last time that a camping trip provisioned for a week managed to go three days without visiting an area store?

Any group of campers is certain to include at least one prima donna and one do-it-all. The prima donna (of either sex) is the camper who arrives with a sign saying, “I'm on vacation, I'm not here to work.” The first act of a prima donna is to set up a lawn chair and begin a paperback novel while everyone else pitches the tent. The true prima donna won't even toast his or her own marshmallows, but filches them from the kids.

The do-it-all, on the other hand, seems to be in the running for the Paul Bunyan Award. You can spot a do-it-all by this type's ever-present flannel shirt, even in summertime, and by his tackling of all camp chores—like chopping wood, pumping water, building the fire—single-handedly. The only trouble with the do-it-all is he (and it could be she) doesn't know when to quit. The do-it-all insists on the woodsy way, even when the rest of the group is ready

to forego an open fire and light the propane stove, to have eggs without ashes one morning.

On any camping trip, be prepared to spend more money than you anticipated. One family went camping with mine because dad hoped to interest mom and the kids in this “healthful, outdoor recreation,” so he'd have years of cheap vacations. But with sirloins for the grill, new sneakers and sweat-shirts all around, and daily runs to the ice cream shop and video arcade at the camp store, he calculated a week at a motel on the Jersey shore would have been cheaper. And, to boot, his family liked “roughing it” and wanted to go again next year.

Everyone's camping trip was roughing it, whether they came back with bandages or a limp hair-do. As one friend, a Viet Nam vet, told us, “Do I want to go camping with you? I spent two years of my life sleeping in the mud. You gotta be crazy to do that for fun!”

I, too, have put a limit on how primitive my camping can be. I do enjoy tenting, waking up to sunlight shining through the canvas and birds singing in the forest trees. I don't even mind trying to coax a fire from last night's coals (yep, I'm a do-it-all) or picking up yesterday's garbage after the raccoons had late supper in the can.

But I won't tolerate uncomfortable sleeping conditions, not if I'm to enjoy

## Another View...

by Linda Steiner



the next day's outdoor activities. Maybe that's why my 9 x 12 wall tent sports rugs, screens, foam mattress beds and pillows and is called the "Steiner Hilton" by friends. After all, isn't it ludicrous to do the backpack-tent, freeze-dried-food, sleeping-on-the-ground bit in an electrically lit campground? Why pretend?

Not everyone has the same roughing it threshold. A gal friend from Brooklyn didn't mind anything about camping — not the mud, the mosquitoes or the skunks — but did insist on having fresh coffee and her hair styled every morning. Consequently, just after dawn, a long electric cord could be seen leading toward her tent site. There, on the forest floor under the pines, would sit the coffeemaker, perking softly to itself, and the hot rollers, steaming in the sunshine. It looked like some modern artist's comment on "Nature and Technology," but it was just a necessary part of the camping experience to her.

### Going to Camp

Portable camps can vary from the spot your blue jeans touched earth for the night to travel trailers so elaborate they need a mailing address instead of wheels. Likewise, a permanent camp can be anything from an abandoned bus to a forest estate where any game served is either "under glass" or "à l'orange." In Pennsylvania, going to camp means as often a hard-walled building as anything made of nylon or canvas.

Camps do not necessarily reflect the social standing and wealth of the owner. When I received an invitation to go to the cabin of a well-heeled, professional man, all my friends were envious. It turned out Doc's camp was an old trailer with yard sale furnishings. The owner proudly told how the one time the camp was broken into, the burglars left him stuff. I believe it.

Few camps are truly rustic; most are just rural. Rarely are they isolated in the deep woods. In a lot of the North Country's camp cities, more people are in residence on the weekends than stay



**SOMETIMES the nicest part of camping is sitting quietly, with no one else around, listening to the near-silence and absorbing the surrounding loveliness.**

in the home neighborhood. And each one says he's getting away from it all.

To my mind, real camps, wherever situated, must meet certain criteria. For example, it's not a camp if it isn't on a dirt road. And every deer season you have to "wonder if we can get in to camp," because of snow, mud or high water. There can be some comforts, but not all the amenities. If there is indoor plumbing, there can be only cold running water. If it's got electricity, there must be a porcupine-chewed, wasp-invested outhouse. Every true camp has yellowed newspaper clippings, of big bucks shot locally, tacked to the walls, along with a couple of shirttails.

The most authentic camp I ever visited had only kerosene lamps, no electricity or white gas lanterns. I was amazed at the light and comfort of living 19th century style. It rained most

of the week and we took walks in the dripping forest and returned to sip hot coffee and watch clouds roll over the summer mountains. And we read old outdoor magazines. These musty, much-thumbed books dated from the '40s and '50s, when adventure, not "how-to" or "where'to" was the keynote for sportsmen. I mentally traveled that week to windswept Alaskan islands for an encounter with a brown bear, and read about Indian shaman magic, and was transported to the dry Rio Grande valley for a tale of coyotes and how the señor won the señorita.

Maybe that's the answer to why we go camping, whatever form that diversion takes: adventure. We don't camp just to go to the woods or to be around wildlife, though they're certainly part of it. I know folks whose home is in a forest setting and they're among the most avid campers. While we're at camp we find our lives a little bit simpler and, at the same time, a little more difficult, and that's what's appealing. Camping takes so many forms that we can either jump into the adventure with both feet or just touch a toe and test the waters.

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**That Every Man Be Armed: The Evolution of a Constitutional Right**, by Stephen P. Halbrook, University of New Mexico Press, Albuquerque, NM 87131, 274 pp., \$19.95. Gun control is one of the most hotly debated issues in America, and also one of the most confusing. Presented here is a thorough account of the gun control issue, beginning with the Greek and Roman philosophies upon which our basic rights evolved, through our country's history to the threats against this fundamental right today. Should be read by everyone.

**Firearms and Violence: Issues of Public Policy**, edited by Don B. Kates, Jr., Ballinger Publishing Co., 54 Church St., Cambridge, MA 02138, 608 pp., \$38. Published by the Pacific Institute for Public Policy Research, an independent research and education organization dedicated to broadening public understanding of market processes and government policies, this book is a compilation of reports on the many facets of gun control. Public opinions and attitudes, gun control and gun ownership are just some of the broad topics covered in this comprehensive volume. A more thorough, unbiased, book on firearms ownership in America today does not exist.

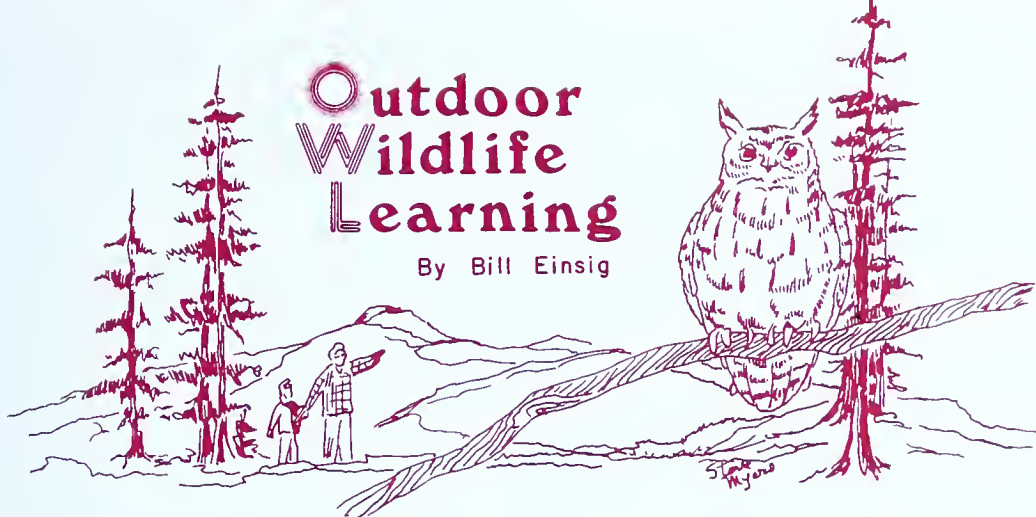
**Afoot in Penn's Woods**, by Carsten Ahrens, Allegheny Press, Elgin, PA 16413, 128 pp., softbound \$6.95. Carsten Ahrens began treating GAME NEWS readers to his vast experiences in the out-of-doors in 1937. Readers enjoy the way he blends natural history information with personal observations gleaned from his years as a biology and English teacher and summertime national park ranger/naturalist. This collection of 40 of Carsten's past GAME NEWS articles covers a wide variety of wildlife species and natural history subjects. For this publication Carsten recently received the Best Book of the Year Award from the Pennsylvania Outdoor Writers Association.

**Of Grouse And Things: The Best of the Drummer**, Mark C. Dilts, editor, The Ruffed Grouse Society, 1400 Lee Drive, Coraopolis, PA 15108, 152 pp., large format, \$22 delivered. For grouse and woodcock enthusiasts, the next best thing to hunting the uplands is reading about their sport. Illustrated by David Gareth Roebuck, this book is a collection of first rate stories that appeared during the past decade in the official publication of the Ruffed Grouse Society. It's about hunting, guns, gun dogs, fine companions, and good times in the uplands.



# Outdoor Wildlife Learning

By Bill Einsig



Have you been streamwalking lately? It's an exciting new method of monitoring the general health of local streams—those that pass through your backyard or those that attract the neighborhood kids. One schoolteacher in New Jersey has been streamwalking for some time with her students and has written an extensive manual to help other teachers do the same thing.

*Project Mayfly* was written by Kay Widmer who uses the same procedures with her own senior high biology classes. The manual is divided into six units, each providing a collection of background information and procedures that would normally require a significant amount of work in a library to pull together. Widmer includes the kind of information teachers want most.

For example, in the first unit, dealing with water chemistry, Widmer assumes teachers will have access to water test kits or the lab facilities to support standard methods. She doesn't give the cookbook recipes but leaves that to the technicians who designed the kits. She does, however, explain how to collect samples, how to organize a class analysis team, and how to interpret the results you get. She helps the teacher answer the student who asks, "My phosphate reading was 2.0 ppm. What does that mean?"

Units 2, 3 and 4 deal with the same kind of organizational advice for analysis of general biological status, bacteria, and plankton as they relate to water quality. The manual includes ready-made data sheets and diagrams of some sample collection equipment that can be constructed at home. Once again, the manual provides practical logistics advice on how to organize a stream study with a class of students.

Unit 6 goes into even more detail in plan-

ning for a field trip to collect samples first hand. Widmer carefully outlines her procedure for assigning teams of students to complete certain tasks. Each team has a written job description that leads them step-by-step in collecting the needed data. Wherever data sheets are needed, they are provided in complete form in an appendix to each unit.

My favorite portion of the manual is Unit 5, "Streamwalking." This activity is one most students will enjoy and is one that serves well as a preliminary to the field trip. In fact, it can serve a useful purpose even without a more extensive field trip. Here's how it works.

Picture all the small streams making up the watershed in your local area. Probably there is at least one major waterway and a whole network of tributaries feeding into it. Most of the streams have probably never been accurately mapped, described or studied at all. There are probably pipes, outflows and drainage tiles that no one remembers, emptying into some of those streams—and there may be several that someone would like to forget.

The streamwalking assignment breaks the watershed into one-mile segments and each student becomes responsible for one segment. That student literally walks in the stream and observes it carefully. He maps it, measures it and describes it. He doesn't take samples for analysis but he does make some subjective evaluation of water quality based on general appearances.

When completed, the streamwalker produces a detailed map of that stream section. The map will show the location of buildings, the nature of the surrounding land use, nearby roads, small feeder

streams, problem areas, and many other features that could impact on the water quality in that small section.

In New Jersey, where Widmer has done this work, such data is shared with the Department of Environmental Protection and other local agencies who have eagerly accepted this help with establishing baseline data. Students feel their work has purpose beyond that of earning a grade in class. They learn much and everyone benefits from their efforts.

Once again, the streamwalking unit is thoroughly supported by model maps, data sheets, and final reports. All the practical advice beginning teachers need is given.

So, if you have not been streamwalking lately, maybe it's time to get started. But first, buy a copy of this manual. Order from the Mid-Atlantic Regional Office, National Audubon Society, 1104 Fernwood Avenue, #300, Camp Hill, PA 17011. \$5.

## **Audubon Adventures**

The National Audubon Society has just completed the first year of a new nature program for youngsters. "Audubon Adventures" is designed as a local club project that can be used by classroom teachers, scout troops and most other youth groups.

The focal point of the program is a bi-monthly newsletter for each young club member. This two-color tabloid is written for intermediate grade students and capitalizes on a highly graphic and interesting format. The articles are appropriately short for young readers, and there are always word puzzles, matching games and other fun stuff to do.

The group leader receives a guide with each issue. It contains background information, teaching suggestions and supplementary activities that amplify the material in the student paper. The student papers are four pages in length, and most of that is art and graphics. The leader's guide is eight pages, nearly all of which is solid

informative text. In fact, the leader's guide is so good it can be used during the year for many lessons that don't necessarily tie into the student newspaper. It's a quality teaching resource in and of itself.

Clubs can be started in two ways and the cost varies significantly. First, anyone can enroll directly with National Audubon and receive full membership for up to 35 youngsters at a cost of \$35 per year. That includes six student issues with leaders' guides, decals, and membership cards for everyone. However, if the membership is "sponsored" by a local Audubon chapter, the cost drops to just \$20 per year.

Some Audubon locals designate funds from their own treasuries to pay the enrollment fee for local school classes interested in the program. On the other hand, some youth leaders pay their own fee but ask Audubon chapters to sponsor them so they can get the price break. It sounds a bit devious but National Audubon thinks that arrangement is a good idea because they want to see local chapters get more familiar and involved with youngsters in their service area.

Other conservation and civic organizations can also help sponsor clubs, but, again, in order to get the price break, the local Audubon chapter must co-sponsor the project. Bringing such groups together for a common project is a good idea too because it broadens and strengthens support for local conservation issues.

There are twenty-three Audubon chapters in Pennsylvania and twelve of them are now sponsoring Audubon Adventures clubs. For the name of the Audubon Chapter nearest you, contact the NAS Regional Office at 717-763-4985 or write to them at the address given in the previous portion of this column.

For a more detailed look at the Audubon Adventures materials, write to the National Audubon Society, 613 Riversville Road, Greenwich, CT 06830.

## **Cabins for Hikers**

Two fire tower cabins located along the Mid-State Trail in central Pennsylvania will be available for overnight hiker use through Labor Day as a result of a cooperative program involving the Keystone Trails Association and the Bureau of Forestry. This program is intended to provide overnight facilities to hikers in the Rothrock State Forest. Caretakers at each cabin will provide information on the area. For details of the program, send a stamped self-addressed envelope to: Keystone Trails Association, Box 251, Cogan Station, PA 17728



**W**ITH NO major hunting seasons in effect July is perceived by most people to be just part of the Game Protector's nine-month "off season." Were it not for landowner contacts and wildlife complaints, this might have a little validity. As it is, we are still matching wits. Only in July we are usually spending more time trying to outsmart beavers and bears than catch poachers.

*July 3*—The month starts off true to form. First we rebait the bear trap, then investigate a beaver complaint near Rich Valley where a camp has been flooded.

*July 4*—It is a state holiday but George Mock, one of the game protectors from Centre County, needs a place to relocate a nuisance bear. We meet in Sinnema-honing and release the bear near Wykoff Run.

*July 5*—On my way to answer a beaver complaint, I stop to check some bass fishermen near Driftwood. They have a number of very short bass on a stringer, and rather than cite them I allow them to release the fish. The smallmouths appear to be in good shape as they swim away. Later, when I discuss the incident with Deputy Waterways Conservation Officer Gary Brown, he informs me that unless extreme care was used both when putting them on and taking them off the stringer, it is likely that damage to their gills occurred and that at least some of them will probably not survive. I have second thoughts about my leniency in this case.

I spend the rest of the day working on a beaver complaint. The beavers have backed up water, partly flooding Olivett's Ball Field near Sizerville.

*July 6*—This morning I am working on another newspaper article for the *Cameron County Echo*. This one is entitled "No Quick Fix," and explores some of the more popular myths pointed to by those who would like to have better deer hunting. The bottom line in the article is that there are no easy solutions to the deer hunting dilemma in the northcentral. Deer up here are not as plentiful as they once were. The habitat has changed, and controlled burning, spraying for gypsy moth, or winter feeding won't to any significant degree, compensate for that.

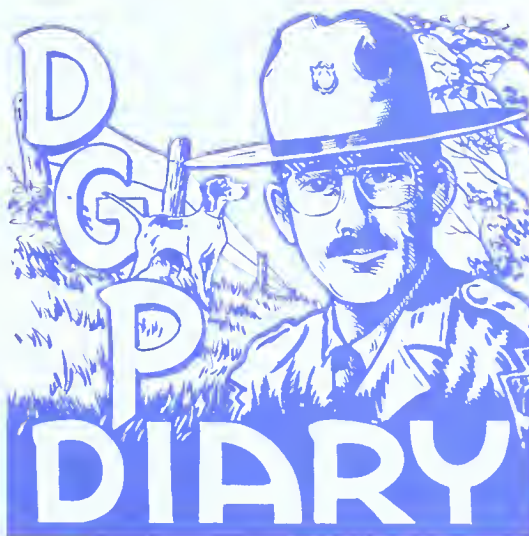
The afternoon is spent making land-

owner contacts. Although about half of Cameron County is state owned and posted land is a rarity, this is not the case in much of the state. Were it not for private land open to public hunting, there would be little area in some counties for this form of outdoor recreation. I stress to local sportsmen that showing appreciation to landowners who allow hunting is not just the responsibility of the local game protector. The hunter, by stopping in to ask permission to hunt or offering a farmer part of his day's take, can do a lot to foster the kind of relations that help us all.

*July 7 & 8*—Both days are spent getting caught up on office work and relocating nuisance beavers.

*July 11 & 12*—Most of these two days are spent researching records over a decade old, back to the times when federal money was used to purchase radio equipment for county and municipal governments. The evening of the 12th is spent at a meeting of the local Trappers Association. We discuss recent changes in the Game Law, especially as they apply to beaver trapping. We are also making plans for our next trapper education course.

*July 13*—I meet with Dog Law Enforcement Officer Rick Johnson, relative to dogs running deer. This is a common problem that we share, mostly in the winter when snows deepen.



**By Joe Carlos**

**District Game Protector  
Cameron County**

*July 17*—The day is divided between landowner contacts, more work on the radio system, and attending a Rotary meeting.

*July 18*—This evening I attend a meeting of the Bucktail Rod & Gun Club.

*July 23, 24, 25, 26*—These days are spent working on newspaper articles, beaver complaints, landowner contacts, and the deputy radio system.

The evening of the 26th is a welcome change of pace as District Forester Bob Martin and I travel to St. Marys for our quarterly Elk Committee meeting. The committee was formed several years ago to bring together representatives of the Game Commission, Bureau of Forestry, sportsmen, and farmers' groups. By having an open means of regularly discussing our different views and problems concerning the elk, some tremendous strides have been made in recent years. For example, an experimental high-voltage low-amperage elk repellent fence developed by Penn State was erected around a field being cultivated by Fred Campbell near Benezette. The five-wire high-tensile fence was evaluated for two years and proved to be highly successful in excluding elk. Mr. Campbell found crop yields to be several times greater than prior to fencing.

The Game Commission and Bureau of Forestry have also established new permanent herbaceous openings in an attempt to attract elk onto state land and away from farmers' crop fields. The Bureau of Forestry has modified their timber cutting guidelines as well to regenerate more aspen, a species highly preferred by elk, and the Game Commission has experimented with controlled burning in order to enhance elk habitat.

All in all, the spirit of cooperation and understanding among the various factions involved with the elk has improved immensely by formation of the group.

*July 30*—This evening we attempt to radio collar an elk on the Anderson farm near Sterling Run. Helping are Dick Sassaman from the Bureau of Forestry, Steve Dechant from the Game Commission's Food and Cover Corps, my wife Anna, and Rawley Cogan, elk research assistant.

One of the best things generated by the Elk Committee was an appropriation of

\$10,000 from the Wild Resource Conservation Fund to be used for studying daily and seasonal elk movements. The fund was begun several years ago so that private citizens and non-hunters could donate a portion of their state income tax refund to enhance species of non-hunted wildlife such as eagles, ospreys, river otters, and elk. The Fish Commission also is apportioned part of the money. Their share is used for endangered reptiles and amphibians, such as the massasauga rattlesnake and the bog turtle. The Department of Environmental Resources receives money to be used for endangered plants in the state.

We are all nearly eaten alive by flies, and no elk come into the cornfield this evening. While there, however, Rawley and I have the opportunity to assess the damage the elk are doing to the corn planted by Driftwood farmer John Mason. Quantifying these crop depredations is an important part of Rawley's job. Prospects look pretty bleak for this year's yield.

*July 31*—Tioga County Game Protector Frank Bernstein and I meet early this morning to dynamite the beaver dam near Truman that has been giving me so much trouble. Frank is one of those old-time jack-of-all-trades game protectors. In addition to being a licensed blaster, he is a firearms instructor, turkey trapper, and bear research cooperator. Frank is one of those guys who never seems to say, "no." Although I'm sure he has plenty of work to keep him busy in his own district, I always enjoy the opportunity to learn from him.

I'd like to spend more time with Frank but must meet Law Enforcement Supervisor Jerry Zeidler at 10 a.m. to inspect erection of a deer proof fence provided for Timber Rock Farms by the Game Commission.

On my way home I have to deliver a revocation notice to a person who was apprehended the previous fall for killing a second deer and attempting to take yet another. These notices are sent out by certified mail. When an addressee fails to pick one up at the post office, it is returned and served by the local officer. I am convinced that in most cases loss of hunting privileges presents a far greater deterrent than the fines. I have found, however, that those unscrupulous individuals who are still determined to cheat will attempt to find ways around even this sanction.



FROM 40,000 feet, Pennsylvania is green and rumpled and patterned with twisting roads. When you pass over Indiana, the land is still green, but the roads form little boxes. Out beyond Kansas City, the green fades into tan and the boxes get bigger. Eastern Colorado is brown, with little green circles, like phonograph records, that are fields of alfalfa under rotating irrigation arms. Between Denver and Phoenix, you cross over large expanses of unremitting brown, and sparsely forested mountains, and then the plane comes down in Phoenix and you get off and are greeted by a blast of shimmering, enveloping heat.

The night I landed in Phoenix, a storm came up from the Gulf of California. The wind rose, the sky turned a sickly green, and forks of lightning darted. It began to rain. It rained until the streets ran axle-deep in water. Some of the streets could not be traveled because they intersected washes, dry gullies that had suddenly become rivers. After I left Phoenix, the effect of the rain showed itself for weeks. The desert, having tasted water, was green.

The desert in southwestern Arizona, southeastern California, and northern Mexico is called the Sonoran Desert. It is 120,000 square miles of sand, soil, and rock, relieved here and there by mountain ranges that look like pale blue, rust-streaked cutouts. Botanists call the Sonoran an arboreal desert because a wide variety of cacti, shrubs, and trees grows there.

### Green Pipe Cleaners

The ocotillo is a shrub that looks like a bunch of green pipe cleaners stuck in the sand. Each arm—there are a dozen or so per plant—is about ten feet tall and covered with thorns. After a rain, small leaves crop out around the thorns. The leaves go to work, photosynthesizing in the bright desert sun. As water dries up, the leaves become a liability, their surfaces giving up too much moisture to the air. So the ocotillo chucks them. It can grow a new crop when rain comes again.



*Chuck Fergus*

Two trees often carpet the broad, sandy washes. One is the mesquite, the other the palo verde. The mesquite, I was told, has a taproot that will burrow 40 feet to find water. Its leaves, to keep from losing too much moisture, curl up lengthwise under a blistering sun. The wood is thorny and dense; its smoke, in a campfire, catches at the throat like incense. *Palo verde* in Spanish means “green stick.” The plant is 20 to 30 feet tall. It has leaves—tiny green mouse ears that look, from a distance, like a green haze—but it sheds them quickly when the weather gets dry, and depends on its green trunk and stems to carry on photosynthesis. The palo verdes I saw were all leafed out.

Cacti sprawl across the flats. The kind called prickly pear grows everywhere; it is the stereotypical cactus with the round, flat pads bristling with spines. The pads grow with their flat surfaces facing east and west, so that only their thin edges stare up at the noonday sun. I saw barrel cacti covered with fish-hook thorns, and topped by flowers like live coals. Another cactus, the cholla, seems to be covered with soft, yellow fur that glistens in the sun; the fur is actually a thicket of spines so loosely attached that they virtually leap from the stems to embed themselves in ankles and calves.

Down around Tucson, the hills are peopled with saguaro. They stand like sentinels, many-armed, knobbed,



stitched top to bottom with parallel rows of thorns. They spread across rocky slopes, clustering thickly in the lee of hills that send them rain runoff and shield them from strong winds. The saguaro grows slowly. At 10 years of age, the plant is four inches tall. At 15 one foot. At 70, 15 feet and branching for the first time. A mature saguaro may tower to 35 feet and may live to be a century and a half old. A heavy taproot and a network of interwoven lateral roots anchor the cactus in the sand. The trunk is composed of vertical ribs, a cylindrical framework encasing a pulpy mass. In this inner pulp, the saguaro can store a ton of water, enough to carry it through months—years—of drought. The saguaro's skin expands as the plant takes on water, contracts as it uses the precious fluid.

The saguaro stand pale green against the ochre hills. The sun makes their spines look fuzzy. Some of the larger cacti have pieces missing from their flesh, like puckered jack-o'-lantern mouths. Woodpeckers chisel out these cavities, and use them for nesting. Elf owls, screech owls, flycatchers, snakes, and bats seek out shade and shelter in the holes.

In Tucson, I stayed with friends in a housing development in the foothills north of the city. As dusk fell, quail called and coyotes yapped from the brushy washes in between the expensive ridge-top homes. Behind us, the

Santa Catalina Mountains turned from rose to purple. A veil of smog descended on the city below, making its lights shimmer.

Phoenix and Tucson, I found to my surprise, are not the arid places they were 20 years ago. They are humid. All of the lush plantings, both agricultural and decorative, return enough moisture to the air to make it muggy and oppressively hot. Phoenix, Tempe, Yuma, Casa Grande, Tucson—Arizona's share of the Sun Belt, a proliferation of factories, highways, corporate farms, open-pit mines, dams, company headquarters, houses, trailer parks, and shopping malls that extends out from the old core cities of the Southwest, groping farther into the desert every day.

### Dryland Living

Modern Americans, or so it appears on the surface, have adapted to dry-land living. They have dammed the desert rivers: in Arizona, the Verde; the Agua Fria; the Salt; the Gila; and, many times along its sinuous length, the Colorado. The Colorado once delivered 13 to 17 million acre-feet of water to the Gulf of California each year. (An acre-foot is the volume of water needed to cover one acre a foot deep.) Today, the Colorado delivers no acre-feet of water to the Gulf of California. It and the other desert rivers have been diverted to crop fields and orange groves and power plants. The water also goes to the rapidly growing cities, so that transplanted Easterners can knock little white balls around oases of green in an otherwise brown landscape; so that cemeteries can be familiarly verdant; and so that suburbanites can trim lawns every Saturday.

The big question, of course, is how long such growth can go on. Already, water tables have fallen across the region. Wells are running dry. Springs have sifted full of sand. Streams are dwindling, alkali whitening their banks. And the growth continues unabated.

The desert is better. A banded coral



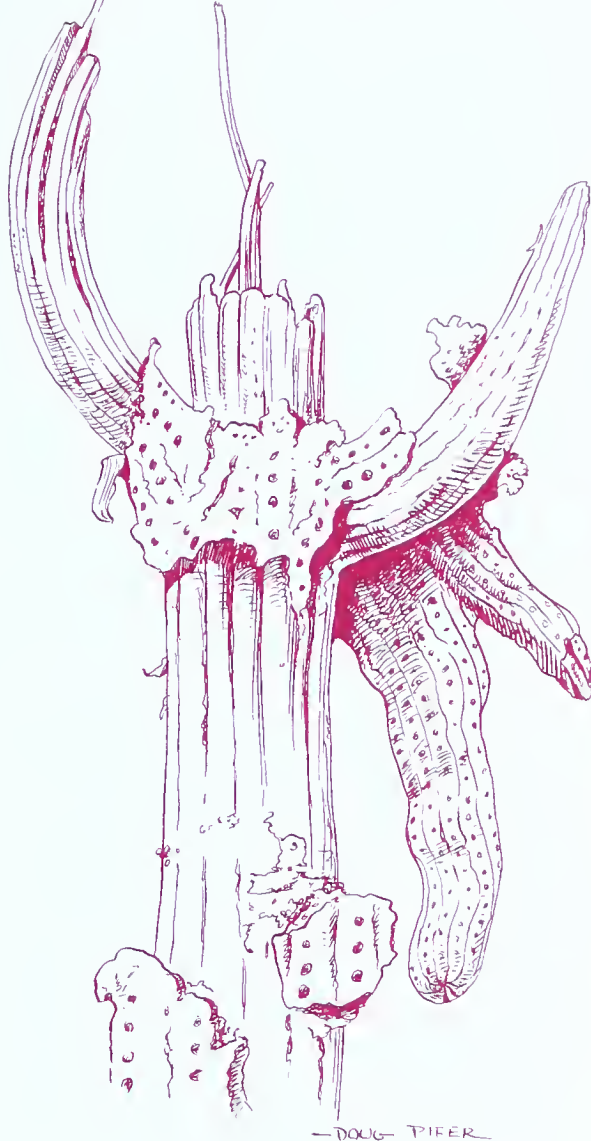
snake that slips across an asphalt road at the edge of town. Black birds in the mesquite like scrawny, moth-eaten grackles. The inquisitive rasp of a canyon wren. A man, Lee Thompson, superintendent of the Pima Agency and himself a Pima Indian, talking softly about deer and mountain lions and bighorn sheep in the nearby Estrella Mountains, within the protective boundary of the reservation.

I drove up through Globe, with its mine and copper smelter, and onto the San Carlos Apache Reservation. I needed a flashlight, and bought one in the agency store, an old boxy building with worn concrete floors and walls painted institutional green, and shelves lined with canned peaches and tools and ropes and blue jeans and mouse-traps and dogfood and toys, shiny bicycles leaning in the corner, black-haired women picking over the lettuce heads, copper-faced men in cowboy hats speaking a tongue that seemed both guttural and smooth at the same time; outside, battered pickup trucks and listing, rusted Impalas that sent the dust floating up to the silver-green cottonwood leaves. An old man told me that the store, the agency office, and the school—the whole town, as a matter of fact—used to be 23 miles south, along the Gila River. They moved it here when Coolidge Dam, built in 1928, flooded them out.

### North to the Navajo

I drove north onto the Navajo Reservation. It is the biggest Indian reservation in the United States, occupying some 25,000 square miles in northeastern Arizona and adjacent parts of Utah and New Mexico; it is about the size of West Virginia.

The road led past red-sided buttes and tan gullies spotted with pale green sage; here and there a cottonwood, with rough bark and trembling leaves, grew in a gully, telling of underground water. Sheep grazed in the sparse grass. Hogans—the traditional round Navajo dwelling—stood off in the distance at the ends of two-lined, winding tracks.



Tall gray clouds marched across the land, trailing shimmers of rain that evaporated before touching the ground; “walking rain,” the Navajo call it. Ahead, a woman in a long black dress appeared on the edge of the road. She turned slowly as the car passed, never letting her face be seen.

The Canyon de Chelly is a deep, two-armed crack in the high, desert Colorado Plateau. It is sacred to the Navajo, a homeland where some of the tribe hid out when Kit Carson and the U.S. Army tried to evict the Navajo to New Mexico in the 1860s. Today, the canyon has a dual status: it is the home of many Navajo families, and it is a National Monument administered by the Park Service.

You are required to have a guide before entering the canyon—either a Navajo or a Park ranger. With a ranger and a handful of other tourists, I walked down into the canyon one day. We went down a sheep trail that switched back and forth alongside the red and coppery sandstone walls. At the bottom, we found bright green grass, scattered peach trees, and the ubiquitous cottonwoods. A stream flowed through the canyon. We took our boots off, knotted their laces together, and hung them around our necks; down the stream we walked, through the mud and the cool brown water, between cliffs blackened and browned by “desert varnish”—water charged with material from decomposing plants.

### Pictures Pecked In Rocks

Our guide pointed out pictures pecked into the rocks: antelope, snakes, ducks, male figures, female figures, figures lying down and playing flutes, turkeys, horseback riders, deer with arrows in their sides; and handprints surrounded by a wash of white mud. Then, at the base of a cliff, beneath a south-facing overhang, we saw walls. Pale, roofless walls unraveling at the edges to show stones under mud plaster. Walls with windows like square black eyes. Now we began noticing them: walls hidden in crevices and crannies all over the canyon. Some of the walls stood on the flat; some were tiered into the cliff and accessible only by handholds faintly visible in the wind-scoured rock.

When the Navajo moved into the region some 400 years ago—or so the archaeologists believe—the ruins stood as they do today. (The Navajo, asked when their people arrived, say, “We were always here.”) The ruins were left by the Anasazi, a Navajo word meaning “the ancient ones.” The Anasazi, farmers and craftsmen, lived across what is now northern Arizona and New Mexico, and into Utah and Colorado. They arrived in the region around 200 A.D. They departed around 1300, drifting mainly to the south and east and

taking up residence on a series of high mesas, where their descendants live today. No one knows what made them move. Maybe it was war. More likely, a span of years when nature withheld the one commodity that makes living in the desert possible: water.

One of the tribes that probably sprang from the Anasazi is the Hopi. The Hopi live on their own reservation, which sits like an L-shaped island in the middle of the Navajo Reservation. I drove there from the east, from the old stone trading post at Ganado, past blue Balakai Mesa, across a plain studded with yucca and sage, shacks and hogans; a vulture flailed up in front of the car, seeming to expand as its wings hit the wind. I dropped down to Keams Canyon, seat of the Hopi Agency, and continued westward across the reservation.

I came out on a windy flat. To my left, in haze, stood jagged crests: the San Francisco Peaks, where the Hopis’ kachina gods reside, and where great clouds of moisture tower up into the sky and come tracking across the land, sometimes dropping rain. To my right, north, rose a long, brittle mesa the color of old bone. As I drove, the mesa grew. I noticed a narrow black band near the mesa’s top. Suddenly I realized it was a shadow from a line of flat roofs. Black windows peered out beneath them. The clear, deep-blue sky expanded above them.

I left the state highway and drove up a side road, past trailers, forlorn houses, and children playing basketball with a ball but no basket. The road narrowed and wound between stone houses plastered with gray mud. Mongrels heaved themselves up out of patches of sun, barking. I drove past the houses, parked, and got out. From the top of the mesa, I could see the desert spreading for miles: sand and dry wash and tan brush and, on far hills, scattered, stunted pines; in the distance, dimensionless blue mountains.

An old man sat on a low wall. He regarded me with eyes set deep in brown, wrinkled skin. He wore a denim



baseball cap, blue jeans, a royal blue shirt with the sleeves rolled up. He grinned. "Where you from?"

"Pennsylvania," I said.

"Pennsylvania? WOW!" He hopped down off the wall. He was maybe five feet tall. We shook hands; his name was Jasper.

Jasper picked up two one-gallon plastic milk jugs. "Water," he said, "from the tap over there in the new town"—with his chin he pointed back the way I'd come. "How'd you like to come over to Old Walpi?" I said I would, and he led the way across a narrow, rocky escarpment.

Below us, down one side of the causeway, spread a fan of wood scraps, cardboard boxes, rusting metal, and bottles and jars slowly turning pink under the brilliant sun. No electric lines followed us across. The road went between low, jumbled houses. It became a footpath. The wind buffeted us. The old man leaned into the wind and went on, across the smooth paving stones and between the gray plaster walls. It was hard to tell where one house ended and the next began. Jasper left one water jug at a neighbor's house, and took the other one home.

Jasper lived on the prow of First Mesa. His was the last and the highest house in Old Walpi. We stopped, and he set the jug of water down. He pointed out two round depressions in the rock floor next to his front door. "Used to be a ladder there some time ago," he said. "It went up to a sentry post on top of the house." He looked out across the land. "The corn fields are out there," he said, with that quick jut of his chin. "When it rains, we put up dams—turn the water out of the streams and put it on the land. We walk to the fields, or we run to the ones that are far away; we keep our tools out there."

The Hopi live in villages dotting the mesas: First Mesa, Second Mesa, and Third Mesa, the long, rocky fingers of land, separated by dry washes, that extend south from Black Mesa. Some of the Hopi have come down off the mesas to live in the wood-and-plaster bunga-

lows put up by the Bureau of Indian Affairs along the highway. Many, though, remain in their isolated homes, holding on to traditions of farming, spirit, and belief that have let them eke out an existence in the desert. When people entered this world, the Hopi say, they were allowed to choose their way of life. The Navajo chose the long ear of soft corn for the easy life. The Hopi chose the short, hard ear that grows even in time of drought. I found myself wondering what kind of corn the whites had chosen.

Jasper's eyes were brown, surrounded by narrow blue bands like rings of ice around ponds. "Pennsylvania!" he said, shaking his head. "WOW!" He grinned. "Hey, you got lots of rain back there. How about sending some of that moisture out here?"

"Okay," I said. "I'll try."

He laughed into the wind.

A week later, I was back in Phoenix. I flew out of the city early one sweltering morning. The plane climbed and swung around to the northeast, heading across the Colorado Plateau. Looking down on the parched and jumbled land, I thought about Jasper; out on the end of his mesa, he said, the only things he heard at night were the sounds of the wind and the jets, which he called "the airborne method."

The jet flew on. I watched the land change from brown to tan, then to a soft pale green, then to deeper green peeking up through clouds. When we landed in Philadelphia, it was raining.

## The Wingless Crow

*The Wingless Crow* is a 200-page hardcover book made up of thirty-three of Chuck Fergus's "Thorn-apples" columns which have appeared in GAME NEWS. Wonderful reading for your own collection or as a gift. Order from the Game Commission, Dept. AR, Box 1567, Harrisburg, Pa. 17105-1567. \$10 delivered.



**PRE-SEASON SCOUTING** can lead to discoveries like this, and give a good idea where to be in the fall. It's nice to feel certain there are deer in a specific area.

## *Summer Scouting*

**By Keith C. Schuyler**

**Photos from the Author**

**A**SIDE FROM keeping muscles in shape for the coming deer seasons, there are a number of good reasons for bow hunters to spend as much time as possible in good deer territory between now and October 5. While there are many demands upon our time during the warm months, pre-season scouting can pay off for those who take bow hunting seriously.

Practicing to become proficient with the bow and arrows is of first importance. But the fact remains that being able to find deer in season is only secondary to the ability to score if one can be found under favorable circumstances.

My first and biggest buck came as the result of pre-season knowledge gained inadvertently a number of years before there was an archery season. Circumstances dictated that I would have only about an hour and a half to hunt on the first day—in the afternoon. With so little time, my mental meanderings and

my brother's Model-A Ford sped to a spot where I had seen two does during the preceding small game season. There weren't many deer in our neck of the woods in those days; it was a desperation try based only on the knowledge of where there were deer.

It paid off with a 12-point, 180-pound (field-dressed) buck!

Although I am first to accept that the happening was more fluke than good planning, it supports the obvious fact that, to tag a deer, you must hunt where they are. But there is more to it than that.

Anybody can prowl the back roads in late afternoon and within legal hours after dark to spot deer feeding in fields bordering woodlots and big timber. This tells you in general where there are deer, but the bow hunter must know much more than that about them to improve chances of scoring.

Even the aforementioned buck, which ran my way after another hunter



had missed it, would have presented an unlikely bow hunting target. I dropped it on my fifth shot with an old pumpkin-slinger at the closest opportunity—70 yards. Importantly, however, a doe was running with him, perhaps one of those I had seen.

Biggest advantage for bow hunters in prearchery season scouting is in the fact that whatever deer are seen are unlikely to change their habits before the October opening. This is in contrast to the opening of gunning season when bucks have been running all over the place looking for sociable does. Further, the holiday atmosphere on the antlered deer opening, when upwards of a million hunters take to the woods, is more likely to move deer away from their regular haunts.

Right now bucks are feeding heavily as their antlers develop to the fullest and the mating urge moves them to set up a scent line. Not until the tail end of the archery season can they be expected to go off their feed as they expend both weight and energy to test their virility. During much of October they can be expected to even run with other bucks until casual sparring turns into aggressiveness.

But, except when the full rut is on in November, food is the real key to finding both bucks and does. They may bed in open woods where they can keep nose, eyes, and ears out for possible danger, but they will move to feed when the shadows are long or completely take over the land. Since white-tailed deer are known to stay within several square miles for the most part, except when pressed by enemies or the rutting urge, their movements won't vary much between now and October 5.

It is true that, with over a quarter-million bow hunters, deer will be



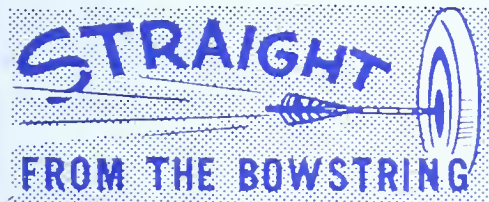
**EVERY HUNTER** knows deer like apples, but scouting can tell precisely which trees have been favored in the time coming up to the season.

alerted by the introduction of archers to the woodland scene. But the more secretive nature of bow hunting and bow hunters, compared to gunners, is less apt to drive deer away from their favorite coverts for any appreciable length of time.

Consequently, now is the time to look for good feeding areas and the presence of deer. Both signs and trails are more easily identified at this time of year than later when leaf fall covers tracks and well-worn trails.

Despite all you read about the use of scents and other means of fooling the unfoolish whitetail, such chicanery is still dependent upon the presence of deer. They may be more scattered now than when heavy hunting drives them into the laurel thickets and heavy slashings, but their feeding habits still follow a pattern—a pattern unlikely to be broken between now and October.

Following a heavy rain, signs are





**IT IS NOT unusual to see several bucks together before they shed their velvet, and this gives a good idea of where they will be later on—even if not grouped up.**

much easier to identify. This is not to say that deer won't mosey up and down the mountain or through the woodlots as they meander after a variation in their diet. But when they are nervous or intent in getting from here to there, they usually follow well defined trails. If this were not so, there would be no well marked trails where deer travel to and from preferred food.

How many times have you spooked a deer and followed it up to find that it headed for the nearest trail for easier escape? Or, how many times have you followed a wounded animal to discover that it soon sought out the nearest well traveled deer path? It is usually only when it runs blindly to escape that it ignores the easy path; or when

it is in serious trouble and heads directly to water or a nearly impenetrable thicket.

Knowing what food a deer prefers and how to identify it can be of help in locating animals. Favorite natural fall forage in Pennsylvania, according to "American Wildlife and Plants: A Guide to Wildlife Food Habits," consists of maple, sweetfern, willow, and wintergreen, in that order. With our maturing forests, acorns are high on the list of favorite foods. Corn, alfalfa, buckwheat, and apples are special treats provided by farmers who don't necessarily plant them for that purpose. Almost anything that grows will be eaten by deer, although most other foods are supplementary rather than staples. This is particularly true in winter when more preferred foods may become scarce.

### **Big Advantage**

A big advantage is knowing where and when deer travel is in choosing stands for attention during the hunting season. Since deer are inclined to travel early and late, particularly after they have been alerted by the continued presence of hunters, a stand well back from their feeding areas but along their routes of travel can pay off later. Planning approaches to such stands so that deer in the area will not be alerted when you move in, can be most important.

The apparent presence of only does is sometimes misleading. While lady deer do outnumber antlered deer, even before the hunting seasons, the imbalance is seldom as much as seems apparent. Since the first "any deer" seasons for archers, the reported harvest has consistently been quite closely divided between male and female animals. Of course, part of this can be explained by the fact that many archers seek only antlered deer during the bow hunting season in the knowledge that they will have a second chance during the gunning session.

Regardless, where does are seen, bucks aren't far behind. Whether their



nutritional needs are such that they must browse more on twigs to build antlers is not personally known. But bucks do not seem to graze alongside does as much as might be expected according to sightings from the high-ways in good deer country.

One way to find out for yourself is in pre-season scouting. By getting back in to observe deer where they spend most of their time, it is easier to determine the ratio of antlered to antlerless animals. And, to make plans.

### Air Movements

Not only are activities of the deer themselves important, but they will also give you a chance to determine air movements for any particular part of the woodlands. Depending upon surrounding terrain and cover, you may find that usual air movements vary from one area to another. Initial air movement at dawn is usually down the slope until the flats warm up and send it back toward the top of the mountains. Deer moving into this early descending air current may sense your hiding place unless you plan to move farther up the trail. Then the air has time to shift before your deer approaches.

The same air movement reverses in late afternoon when rising warm air is overcome by cooler currents from higher elevations.

This was illustrated to me a few years ago when a stand produced nothing but a long wait each morning. It was well

## GAMEcooking Tips

### English Baked Pheasant

- 2 pheasants, skin on
- 1 pint ale or beer
- 1½ cups Italian seasoned bread crumbs
- 2 eggs, beaten
- 1 tsp. paprika

Cut unskinned pheasant into serving-size pieces. Arrange in deep dish or sealable bag. Pour beer over fowl and marinate two hours at room temperature. Remove from marinade and roll or shake in bread crumbs in plastic bag or deep bowl. Dip in egg and again in bread crumbs. Generously sprinkle with paprika. Arrange on cookie sheet or in baking dish. Bake at 350° for one hour. Easy. Serves four.

—FROM WILD GAME COOKERY  
BY CAROL VANCE WARY

back and much higher than the distant fields where the deer fed at night before a long hike up the mountain. I thought I had chosen well. One morning I was an hour late getting to my stand, and it was quite light by the time I was settled in position. Within 20 minutes three deer came right up the mountain to me, and I had my winter venison.

We can all learn. And the best place to learn is where the deer live.

## GAME NEWS Cover Prints Available

In answer to numerous requests, we can now supply a selection of GAME NEWS covers in a size and format suitable for framing. A set of four covers, all by internationally-acclaimed wildlife artist Ned Smith, now is available. These are full-color prints, enlarged to 9 x 12 inches on 11 x 14 heavy, coated paper, without the GAME NEWS logo. The set includes a woodcock, a woodchuck, doves, and deer. These prints are not available individually. The price is \$4 per set, delivered. Make check or money order payable to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, Pa. 17105-1567.

# The Magnifying Glass

By Don Lewis

Photos by Helen Lewis

**"I** NEVER thought for a moment that I'd ever want a scope on my rifle, but after making those two shots tonight with your outfit, I've changed my mind."

I didn't answer the silver-haired hunter who was running his fingers along the Redfield 3-9x that decorated my 22-250 Ruger. I could tell at a glance he was sold on the optic sight.

"I'm really proud of myself," he went on. "Made two of the longest shots of my life this evening. One had to be over 175 yards, and it took 238 steps to get to my second kill. I was flabbergasted—couldn't believe it."

"That's good shooting," I said. "Why didn't you scope your 218 Bee?"

"Never tried for long shots since I couldn't see too well. Most of my chuck shooting was under a hundred yards. With a Williams peep sight, I didn't have much trouble. Now and then, I'd

whack away at a chuck farther out, but if I did connect, it was mostly luck. It was after our session on your 200-yard range with the Ruger that I understood the value of a scope."

Our conversation lasted more than an hour, and when the elderly gentleman handed me the Ruger No. One I had the feeling it wouldn't be too long until he would have a similar outfit.

The American shooter certainly did not invent the rifle or the telescopic sight, but he can take credit for introducing accuracy to the rifle-shooting fraternity. Since early settlers were dependent on accuracy not only for food but also in life and death situations, it's not too hard to understand why accuracy was so important.

The very first colonists brought European smoothbore muskets to this country, but it wasn't long until they learned this type of firearm lacked both

**LEWIS ADMIRES WOODCHUCK** taken by Gun Digest editor Ken Warner with Redfield-scoped 22-250 Remington.





the power and accuracy needed to provide meat for the table and protection for the community. I'm sure that developing a better firearm was high on the priority list. Within a few years, the rifled barrel using the patch and ball combination offered genuine accuracy.

Although major steps had been taken on the accuracy road, the years between the Civil War and World War I saw a heavy trend toward developing repeating firearms and self-contained cartridges. Again, it was a case of necessity. Americans were moving westward, and Indian battles and hunts for buffalo and other large game called for firepower.

In the early 1920s, it became apparent conditions had changed. The hunter was no longer feeding a wagon train or a large family; the need for firepower was dying out and accurate shooting became paramount with demanding sportsmen. The pendulum was swinging toward good shooting and sighting accuracy; the era of precision target shooting had been born.

### Clear Image

Target shooting or "shooting at a mark" had been popular since colonial times, but in most instances it was limited to distances under 150 yards. Beyond that range only a few specialists could perform with a high degree of accuracy. The adjustable aperture (peep) sight with its accurate windage and elevation adjustments was a significant improvement. But it was the magnifying telescope sight with its vision-correcting abilities that showed all shooters a clear sharp image of the target, regardless of the distance.

I've mentioned several times that the



**GARY SUTHERLAND** finds spotting scope a distinct aid when sorting distant chucks out of shadowy fencerow. Its high power makes for positive identification at long range.

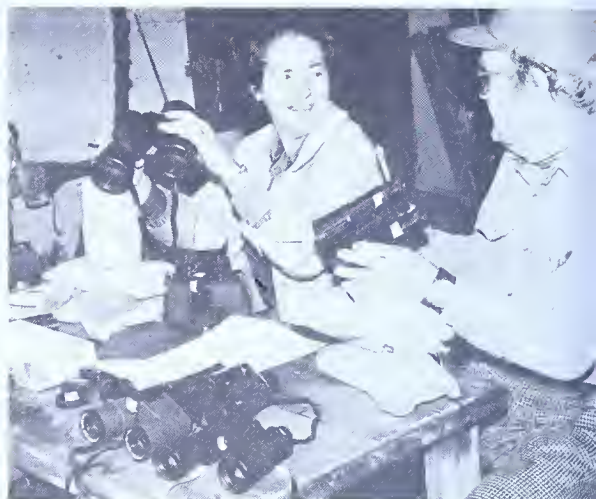
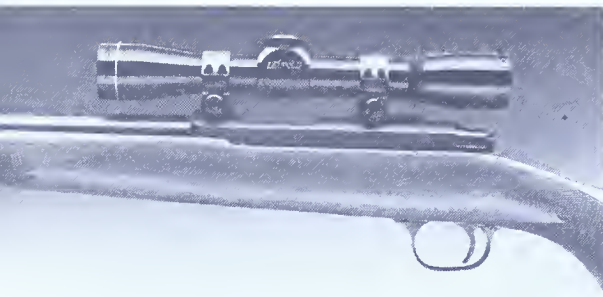
telescopic sight is not a modern invention. The optical sight dates back to the early 1700s, and it has been used for long range shooting since the Civil War years. As rifles became more accurate and ammunition more consistent, it was evident that the optical sight was the logical choice to complete the shooting triangle.

After the close of World War I, some scopes were imported from Europe. They were optically sound, but many were large and heavy and they were not particularly adaptable to American hunting purposes. On top of that, they were expensive. American-made scopes began to appear, and I think it's fair to say that Bill Weaver developed the first scope suitable for big game hunting that was within the financial reach of many hunters.

It's true that the rifle scope had internal problems for a number of years, but the modern product is a far cry from its forefathers and can be depended upon under all types of weather conditions; it's not just a fair weather device.

I have trouble understanding why a segment of today's hunters still frown on using a scope. From a standpoint of clearer sighting, the scope should be first choice for the hunter. Going a step further brings us face to face with the





**HELEN AND DON LEWIS** spent many hours comparing 29 binoculars from 6 different manufacturers to get personal idea of how they stacked up for hunting in Pennsylvania. Above, Leupold's 4x Compact looks right at home on Ruger's new M77/22.

scope's optical system. It is vastly different from the open sight arrangement. Normally, with open sights, three factors are involved—target, front and rear sights. The aperture sight cuts these factors to two—front sight and target—but the eye is not capable of focusing on two distant things at the same time. So the eye's focus flicks back and forth from one to the other. This is time consuming and gets much harder to do as years pile on the hunter. But the scope solves this easily.

The scope's advantage in this regard lies in the fact that its reticle (aiming unit) and the target's image are on the same optical plane. Therefore, the reticle appears pasted on the target and everything is in focus. The hunter finds his target in the field of view, and there in the same focus, appearing at the same distance, is the reticle. It's as simple as that.

I have listened to the old argument that open sights are faster since no time is lost finding the field of view in the scope. Let me say that when a scope is properly mounted for the user, there is no searching for the field. It's just there. Seeing through the scope is as natural as looking through the windshield of a car. Actually, the scope is faster than open sights. Here's why.

When a scope is properly mounted and focused for the shooter's most com-

fortable shooting position, there will be no searching or squinting as you try to focus the eye on the two sights and then on the game. The target is seen instantly in focus with the reticle when the rifle sinks into the shoulder pocket.

It's only fair to point out that the transition from open sights to the telescopic sight is not an instant thing. To the contrary, it requires practice. I often suggest to a new scope convert that he practice by quickly shouldering an *empty* rifle and picking out distant objects such as rocks, stumps or even flying birds. The whole thing won't jell in one or two sessions, but it won't take long until everything comes together.

### Live Ammo

Once the shooter sees instantly through the scope, it's time to head for the range and break out the live ammo. Shooting a couple boxes of ammo from a benchrest on a range will accomplish several things. It will overcome any fear of being struck by the eyepiece of the scope, and it will give the shooter a permanent record of how he is progressing. After two or three sessions, there will be a noticeable improvement in accuracy.

The rifle scope is not the only magnifying glass that has aided the hunter. Binoculars and spotting scopes play major roles in the shooting world. The varmint hunter with a high quality binocular of 7x to 10x can survey the



landscape for hours without undue eye fatigue. And a spotting scope of 20x or so gives the competitor a complete readout of his target. There's no end to the benefits offered by the magnifying glass. Whether it's a 4x scope on a deer rifle or a 24x spotting scope in a chuck meadow, the magnifying glass simply can't be overlooked.

The rifle scope is not a panacea; it won't cure everything. And if the hunter thinks in terms of magnifying power only, it could turn out to be a poor investment. About the time you read this, I hope to be taking a few shots at prairie dogs in South Dakota. You can bet your best hunting knife that I'll be using 7x binoculars and nothing higher than a 10x scope. The blistering prairie

sun emphatically has proved the disadvantage of too much power under certain conditions.

My final suggestion is to go for high quality optics in any form of magnifying glass. Whether it is a scope or a binocular, it should be considered a lifetime investment. The initial outlay will be greater, but that will soon be forgotten. Time is the real test of optics. It's almost impossible to detect any real difference between good and poor units when the purchase is made. But durability depends upon quality. The years will be the judge, and from my long association with magnifying optics, I'd suggest saving a little longer and going for the top. You won't regret it five years down the road.

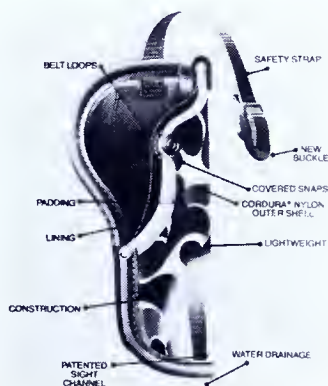
## GUNnews for Shooters...

"SoftAir Guns" is Daisy Manufacturing's monicker for four new airgun replicas of famous handguns. They shoot 25-cal. plastic ammo at lower velocities than standard airguns, and are intended to offer adults indoor target shooting entertainment. One resembles an American DA auto pistol, two are replicas of German autos, and one (shown) copies a popular American revolver. (Daisy Manufacturing Co., Rogers, Arkansas 72756.)



The Saddle-Proof Scope Mount, originally designed for the M336 Marlin, has been adapted to the M94AE Winchester. Easily installed, it positions straight-tube scopes low and centrally and supports the scope solidly at both ends. Its streamlined front tube gives good protection to the scope's objective lens. (Orchard Park Enterprises, P.O. Box 563, Orchard Park, NY 14127.)

An extensive line of Cordura nylon holsters, plus belts, speedloader pouches and cartridge carriers, is available from Uncle Mike's. Holsters (hip, vertical and horizontal shoulder, and others) are laminated, with a Cordura outer shell, closed-cell foam padding and smooth nylon lining. A polymer-coated nylon web sight channel prevents front sight snagging, and there are safety straps. (Michael's of Oregon, P.O. Box 13010, Portland, OR 97213.)



# *In the wind*

bob mitchell



Penn State researchers studying the acid precipitation problem report that our waterways may be threatened more by the springtime melting of acidic snowpacks than by acid rain. The sudden release of pollutants held in snowpacks quickly raises the acidity of waterways, possibly causing the fish kills reported in poorly buffered mountain streams during spring runoffs. It also was reported that snowpack acidity does not appear to be influenced as much by the sulfur emissions from factories and powerplants as acidic precipitation at other times of the year. Rather, nitric acid, primarily from auto emissions, appears to be the major pollutant. Because of sporadic wintertime thaws here, the problem is not as severe as it is in states farther north.

A total of 231 species of birds have been confirmed as breeding residents of New York as a result of the state's breeding bird atlas project. For four nesting seasons 1,200 volunteers—providing 190,000 hours of volunteer time—systematically censused 5,300 nine-square-mile blocks for evidence of nesting birds. This project is being funded by the state's income tax checkoff program, and is similar to one now being conducted in Pennsylvania as part of our Do Something Wild income tax checkoff program.

The Michigan Department of Natural Resources recently received 23 "black-neck" pheasants and 1,000 pheasant eggs from China. These pheasants, which are closely related to ring-necked pheasants, will serve as breeding stock for, it is hoped, a wilder, more viable strain of bird able to exist in the state.

The Peregrine Fund of Cornell enjoyed a record production of peregrine falcons in 1984 when 124 young were produced, double the 1983 total. In addition to a lot of good luck, a more nutritious diet—fresh quail—is thought to be largely responsible for the '84 success. Of the total, 108 were raised and released from hacking towers while the other 16 were placed in the nests of breeding pairs in the wild. Adding further support to the Fund's re-introduction program is the fact that 27 pairs of previously released falcons were located in 1984, up significantly from the 17 found in 1983. Of the 27 pairs, 16 attempted to nest; 12 were successful and produced a total of 30 young.

**For killing a golden eagle, using a big game animal for bait, and for taking a furbearer without a trapping license, a Wyoming man was fined a total of \$2,200 and sentenced to 2½ years in jail. Of this, however, \$1,800 was suspended and two years will be served on probation, during which time the violator may not hunt, fish or trap.**

Biologists with the Alaska Department of Fish and Game conducted a moose mortality study in which 52 calves from one to seven days of age were radio collared. After six weeks, only eight of the calves were still alive. Predation was the cause for 32 of the 44 deaths. Of these, 24 were attributed to brown bears, 4 to black bears, 3 to wolves, and 1 to coyotes. Drownings, other accidents and abandonment accounted for the other 12. The 8 that did survive beyond six weeks of age, however, were still alive when the project was concluded.

A total of \$114,190,000 in Federal Aid Funds—commonly referred to as Pittman-Robertson and Dingell-Johnson funds—was distributed among the nation's states and territories in 1985. These funds are derived from excise taxes on hunting and fishing equipment, and are distributed among the states according to the number of licensed hunters and anglers, and each state's relative size. Pennsylvania's share amounted to \$3,344,127—\$2,918,427 for wildlife and \$425,700 for fish.





## **Voluntary Waterfowl Stamp No. 3**

Pennsylvania's 1985 waterfowl management stamp, created by Ned Smith, is the third such stamp offered by the Game Commission to provide waterfowl enthusiasts and stamp collectors an opportunity to help protect and manage waterfowl in the state. Funds derived from these sales are used for waterfowl habitat acquisition and development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Available at the Game Commission's Harrisburg office, regional offices, the Pymatuning and Middle Creek Wildlife Management Areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints are available from art dealers and galleries nationwide. Collectors note: The agency's first stamp, issued in 1983, featuring a pair of wood ducks, will be available only until December 31, 1985, at which time remaining supplies will be destroyed.



This 216-page soft-cover book contains all of Ned Smith's "Gone for the Day" columns which appeared in GAME NEWS over a four-year period, including approximately 40 full-page wildlife illustrations and over 100 pen and ink sketches. Price, \$4 delivered.

Make Check or Money Order  
Payable to

**PENNSYLVANIA  
GAME COMMISSION**

P.O. Box 1567  
Dept. AR  
Harrisburg, Pa. 17105-1567



# PENNSYLVANIA GAME NEWS

AUGUST, 1985

60 CENTS



© Bob Arbogast '85



## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. If you are not sure of which maps you want, write for a PGC map order form.



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doebler, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starner**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**GAME COMMISSION**  
(717) 787-4250

**FEATURES**

- In Praise of the Towhee**..... 3  
By Carsten Ahrens  
**I Hate Venison** ..... 6  
By Michael Raykovicz  
**Branching Responsibilities** ..... 12  
By Bob Mitchell  
**Coon Concentration** ..... 17  
By Joe Kosack  
**The Affliction** ..... 20  
By Paul A. Matthews  
**The Truth About Buck Huntin'** ..... 25  
By Richard G. Cole

**NEWS**

- Field Notes**..... 30  
**Conservation News** ..... 35  
By Ted Godshall  
**Books in Brief** ..... 54, 58  
**In the Wind**..... 64  
By Bob Mitchell

**COLUMNS**

- GAMEcooking Tips** ..... 27  
By Carol Vance Wary  
**Outdoor Wildlife Learning** ..... 43  
By Bill Einsig  
**Another View** ..... 45  
By Linda Steiner  
**Young Artists Page** ..... 47  
**DGP Diary** ..... 48  
By Joe Carlos  
**Thornapples** ..... 51  
By Chuck Fergus  
**And His Three Sons (Archery)** ..... 55  
By Keith C. Schuyler  
**The Holster Gun (Guns)** ..... 59  
By Don Lewis

**COVER PAINTING BY ROD ARBOCAST**  
(Cover Story on page 19)

PENNSYLVANIA GAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Second-class postage paid at Harrisburg, Pa. **CHANGE OF ADDRESS: POSTMASTER:** Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1985 by the Pennsylvania Game Commission. All rights reserved.

*NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.*

## Steel Shot is Coming

THE HANDWRITING IS on the wall: steel shot is coming. When and to what extent has yet to be determined, but there's no doubt this nation's waterfowlers will be required to use steel shot in more and more areas in coming years.

Everybody who has been following the shooting sports to even the slightest extent over the past decade undoubtedly is aware of the lead shot-steel shot controversy. In 1976, the U.S. Fish and Wildlife Service, through the various state wildlife agencies, began prohibiting the use of lead shot for waterfowl hunting in areas where significant lead-caused die-offs of waterfowl were occurring. Since 1977, Pennsylvania has required waterfowl hunters to use steel shot in Crawford County, at the Middle Creek Wildlife Management Area in Lebanon and Lancaster counties, and within 25 yards of the Susquehanna River from Northumberland to the Maryland line.

Regulations in Pennsylvania and every other state are going to become more stringent. It's inevitable.

Opponents of steel shot argue that it is less effective than lead. Crippling losses are higher, shooting ranges are shortened, they say. To an insignificant extent, these statements may be true. But in the end, such arguments are irrelevant.

Lead is a toxic element. It causes sickness and death in all living things, man included. Consequently, the use of lead is being curtailed everywhere possible. It's no longer an ingredient in paint. It's being phased out as a gasoline additive. It's also being phased out as a shotshell component.

An estimated 3000 tons of lead shot is deposited annually in our nation's wetlands; it's in these areas where lead poisoning is most acute. The National Wildlife Federation reports that 17 bald eagles died of lead poisoning in 1984. This is over 15 percent of all diagnosed bald eagle deaths that year. It's been estimated that about two million ducks, geese and swans—three percent of the North American population—die annually from ingested lead shot. While the exact figures are subject to debate, the fact remains that significant numbers of wildlife are lost each year to lead poisoning.

Wildlife managers are obligated to alleviate mortality factors whenever the need is recognized and the means is apparent, and such is the case with lead shot. Hunters, too, should feel such an obligation. Nonhunters are determining the future of hunting. How this majority perceives hunters and hunting is vitally important. Hunters cannot afford to be ignorant of or unsympathetic to these losses. The losses are real, and more and more people are becoming aware of them. Hunters must take the initiative to solve this problem. We can ill afford to be forced into submission on this issue.

Opposition to steel shot is largely based on a lack of understanding. Most hunters don't actually know the performance differences between lead shot and steel shot, nor how these differences are accommodated for in the field. But extensive field testing has proved that, although steel shot is not the same as lead, it is effective over essentially the same ranges.

Convincing waterfowlers that steel shot is satisfactory for waterfowl will not be easy. Old traditions die hard. But hunters who are willing to learn which loads, chokes, leads and other factors are needed with steel shot will see that it works. Hunters cannot afford to fight this issue. The stakes are high and the outcome is inevitable. Society is demanding it. Steel shot is coming.—*Bob Mitchell.*





# In Praise of the Towhee

By Carsten Ahrens

ONE OF THE most unsung of all our songbirds is the rufous-sided towhee. Never in nursery rhyme, song, or story have I found it mentioned. Only in ornithological books does it get any attention. The name, towhee, isn't even a widely accepted common name for the songster. I have found this bird to be known as the chewink in Ohio, a red-eyed towhee in Indiana, a rufous-sided towhee in Pennsylvania and ground robin in Maine.

I've the notion that a visiting Englishman gave it the name of ground robin, back when the English were scouring the world, laying claim to every new found land for their king or queen. All of England has a great affection for a little thrush they call the robin redbreast. So in America, Australia, India and wherever else in the

world a limey found himself along with a bird with some shade of red on its underside, it became "robin." So our big thrush with its all red breast became the American robin and the finch-like towhee became the ground robin. All three birds are black above with splashes of white in their wings and tails, but that's where their similarities end.

Towhees are found over most of North America. Many are at home in Central America and one, the Arctic towhee, spends its summers in the Canadian provinces of Alberta and Saskatchewan. The majority of them are feathered in browns and grays and blend in quietly with their surroundings. A few have white irises but most are "red-eyed."

Of the various towhees, none is as

brightly colored or as widespread as is the rufous-sided species (*Pipilo erythrophthalmus*). It is a bird about the size of the red-winged blackbird, but it has a longer very expressive tail that it uses with Spanish grace, especially during courtship.

The towhees seem to like living near man, but not as close as the robin. They won't nest on a windowsill or over a doorway. In each of the 40 years I've lived on my half-acre hilltop, a pair of towhees has arrived in the spring and set up housekeeping at the edge of the part I mow. That edge is the beginning of a wilderness of curving inclines that sweep down to Wind Gap Road a quarter-mile below. Down there, walking is difficult but apparently flying is not. The towhees stay on this thick hillside, they do not come into the yard or splash in the birdbath as the robins do.

### End Of March

Each year, during the last two weeks in March, male towhees pass over the hilltop. I know when one is about by either of two very characteristic sounds. In a clear loud but cordial call, he invites me to "Have some tea-e-e-e", or, if he doesn't sing, I'll hear a racket somewhere out of sight as he vigorously sends last fall's leaves flying. Then he surveys the little area he has just cleared in search of edible seeds or insect eggs, larvae, or overwintering adults. The noise a scratching towhee can make leads one to believe an aggressive old hen is at work rather than a bird the size of a towhee. Should I accept his invitation for a tea break and approach the singer, he abruptly changes his cheerful song to a tart "chewink . . . chewink."

Towhees in their springtime nuptial plumage are really eye-taking. The males are mostly black, except for the snowy underparts and bits of white in tails and wings. Since the tail is often spread as the bird moves about, it gets considerable attention. Then, for which they are named, on either side, between the underside white and the black of

the wings, is a wide, somewhat irregular, bright rufous streak. This streak continues on back to the covert feathers. The females are attired like the males except that the black is replaced by a rich brown. The appearance of both sexes is further enhanced by eyes that have black pupils surrounded by bright red irises.

When a male decides to stay the summer on my hillside, he selects a limb on one of the taller trees for his regular perch and from that vantage point, day after day, he proclaims to all other towhees that this is his fief and that they better go elsewhere. About a week after the males move through, female towhees follow and the singer hopes one of them will consider his estate, himself, and his song worthy of a summer's stay. When one stops there is much activity. He leaves his high perch and doesn't return to it for the rest of the season if she decides to stay. There is much chasing about the hillside shrubbery, like a game of tag, follow the leader, or whatever in their courtship. There is much flashing of white and black or brown in their flight. Both birds join in the chorus at dawn.

Contrary to all the excitement and activity associated with courtship, towhees appear to be in no hurry to make a nest. The female seems to be the one who selects the site and she is certainly the one who does the building, although the male is always on hand to give advice, encouragement, guard the site, and to occasionally carry in building materials. But it's a leisure construction project often occupying weeks, and even when it is finished more days pass before she considers it home.

I have chanced on only three towhee nests on the hillside. I've never found one when I deliberately sought it for the birds are usually out of sight when singing and the music has a will-o-the-wisp, ventriloquistic quality that seems to lead me anywhere on the steep slopes except to the nest. The birds never feign injury as quail and killdeer often do.

Two of the nests were on the ground



and one was shoulder-high in a dense hawthorn shrub. The two on the ground were rather crudely built of large weed stems and twigs, and with finer material around the cuplike center lined with rootlets and grasses. The whole was held together with fibers from the many wild grape vines that burden the surrounding trees. The third nest was really very neat and sturdily built into the hawthorn stems. I suppose some towhees — like humans — are neat, and others are not.

One nest held four eggs; another, five; and a third, six. All had white shells with chestnut speckling. In two of the nests, cowbird eggs had been deposited and in each case the towhees raised their own young and the interlopers' as well.

The job of incubating the eggs was left, again, to the female. But the male made himself very useful about 14 days later when the helpless young hatched. May had come with warm weather, and although insects and spiders were becoming more numerous, he still spent a great deal of time searching through the ground cover for food to nourish the growing young. He also helped keep the nest clean by carrying away the fecal sacs of the young, and when the sun was hot, with outspread wings he provided them with shade. Growth was fast; the nestlings left the nest in another two weeks but remained in the surrounding bushes, demanding food. The young cowbirds were around even longer, insisting on care from their surrogate parents.

As soon as the first young fledged a second brood was undertaken. The old nest was abandoned and another built in a shrub close by — it was as inelegant as the first. The second brood had much more variety in their diet for June had come with many ripening wild fruits.

The parents never left their lower hillside haunts to purloin strawberries and other fruit from my garden as did the robins, brown thrashers, and waxwings.

As soon as the towhees begin the seemingly endless task of satisfying the hunger of their nestlings, the "Have some Tea-e-e-e" songs cease. They become silent workers and use only a cross "Chewink" should an intruder come near the nest. Robins, titmice, and mourning doves often continue to express themselves in song after nesting season is past. Towhees, however, shut off the music and don't sing again until another springtime arrives.

Towhees do not make a big ado about fall migration. They start south when days shorten and frost approaches. They are not high flyers. Instead they move slowly southward, depending first on insects for food and then on weedseeds and occasionally on grain that they glean from harvested fields.

Bird watchers tell me that an occasional towhee becomes a winter resident, but to my knowledge, I've never entertained a towhee at the feeder on my hilltop.

I welcome towhees, chewinks, ground robins, or whatever else they're called wherever I find them. I know that spring is soon to come when they arrive and suggest having an impromptu teaparty.



**THE NOISE** a scratching towhee can make leads one to believe an aggressive old hen is at work rather than a bird of its size.





**If You Pay Attention to These Suggestions for Taking Care of Your Deer and Preparing It for the Table, You'll Rarely Hear Anyone Say . . .**

## **I HATE VENISON!**

**By Michael Raykovicz**

**O**NE THING that never ceases to amaze me is the number of people who dislike venison. "Tastes too gamey . . . Tastes strong . . . Tastes like liver," are all comments I've heard whenever I mention the possibility of a venison dinner.

I must admit that in many cases the laments are appropriate. However, I view the situation as a personal challenge. Numerous venison hating friends have been invited to dinner. They have from time to time been treated to "filet mignon," "Chinese beef with Hoisen sauce," "meat" loaf, "filet de beouf stroganoff," and "spiedies," a local summertime favorite consisting of skewered marinated meat grilled over a hot charcoal fire and served sandwich style with a fresh spinach salad. All proclaimed their dinners to be (in all modesty) superb. None—I repeat, none—knew that the meat was venison.

Why the difference? Why would these same people wrinkle their noses at the very mention of the word venison? Much of the answer, I feel, is in what happens to the animal after it is bagged, and in the final preparation of the meal itself.

I recall as a young boy walking home from school during hunting season and seeing deer hanging from back porches, trees, poles, and anything else that would support the weight of a carcass. One or two deer hanging on opening day would be joined by two or three others as the week progressed and hunter success increased. Then as if by magic, the second Monday would find all porches, trees and poles empty. After a week of hanging, often through noticeable temperature fluctuations,

all those deer had been, as some game digests put it, "reduced for consumption." Perhaps the meat of those animals was thoroughly enjoyed, perhaps not. Knowing what I know now about caring for and cooking venison, I lean toward "perhaps not."

I was fortunate. As a youngster I was often taken on rabbit hunting trips to the Poconos by three older men. They were not only good friends, but butchers by trade. Long before I ever got my first deer, I was indoctrinated by their unending conversations during the long drives to and from our favorite hunting areas. The conversations often turned to deer and deer hunting, and of course there was a lot of shop talk about the best way to handle deer meat. At least a hundred deer were talked about, shot and butchered during those rides. I learned that no kind of meat would be palatable if it was handled poorly. The following information is a distillation of what I've learned over the years concerning the handling of game and its preparation as delicious table fare. Virtually anyone can prepare Pennsylvania "jumping beef," provided a few simple rules are followed.

So now you've done your homework. You have scouted your favorite hunting area and you arrive at your post before daylight and get comfortable. Later that morning all your preparations pay off. A fine Pennsylvania whitetail lies at your feet, downed instantly by a well-placed shot. Your job is done. Or is it? How you handle the carcass from this point on will have a great deal to do with your enjoyment of the meat at a later time. You might be interested in

a few ideas to ensure fine tasting meat. Let's begin immediately after the kill.

If your deer is a buck, loosen the penis and scrotum by cutting between them and the belly and lay everything backward, still attached at the rear. Shove the blade of your knife into the deer from the rear and cut completely around the anus, guiding the blade around the perimeter of the hole through the aitch bone. This will free things so they can be pulled forward when the time comes. Next, with the cutting edge of the knife up, make an incision lengthwise through the belly skin, beginning at the breastbone and extending it all the way to the rear. A layer of thin muscle will be visible when the hide retracts. Gently work the point of the knife through this near the ribcage, edge still up. Use two fingers of the other hand to lift and spread this muscle layer and cut it toward the rear. Be careful not to puncture an intestine or the bladder. Squeeze the bladder to empty it and do the same with the last few inches of the intestine leading to the anus. Then pull the anus and penis forward through the hole in the pelvic arch.

### The Diaphragm

Now turn to the front end of your incision. You'll see the stomach ahead of the intestines and the liver ahead of the stomach. Just forward of that is the diaphragm, a sheet-like membrane which divides the body cavity vertically. Cut this free of the ribcage and reach forward through the chest cavity into the rear of the neck. With one hand, firmly take hold of the ridged windpipe and smooth gullet and pull toward you. With the other hand, carefully work your knife ahead and cut them free. When you pull them out, the lungs and heart will come along. A little cutting to free things and all of the deer's innards can be rolled out on the ground.

Save the heart and liver. Many people who "hate" venison find these two organs highly appealing. People who like liver tell me there is no finer kind than that from a deer. A small plastic

bag secured with a rubber band makes it easy to carry these organs in a pack or the game pocket of your jacket. But let them cool while you cut away as much fat and coagulated blood as possible. When this is done, turn the deer belly down to drain. This step is important as coagulated blood can impart an objectionable flavor to the meat. Under no circumstances wash the body cavity with water. Doing so will not allow the natural "glaze" to form in the abdominal cavity, thus increasing the likelihood of contamination. (If you're still unsure about how to field-dress a whitetail, write for the Game Commission's free publication, "To Field-Dress a Deer," by Ned Smith.)

Once the deer has been brought home, the next step becomes absolutely crucial. No matter how long a day it has been, no matter how far you might have dragged the animal, no matter what time you get home, you must remove the hide. The hairs on a whitetail's hide are hollow and provide extremely efficient insulation against winter's cold. This same insulation prevents body heat from escaping. Any butcher can tell you that it is vital to cool down any carcass for good tasting meat. The reason is simple. Heat is an insidious robber of taste. Bacteria deep within the flesh near the bone begin to multiply and produce a condition known as bone souring. This bacterial action can be retarded only by rapid cooling.

This lesson was emphasized a few years ago when I was hunting with my good friend Dan Thornton. It was a bitterly cold day. Dan shot a fine mature doe about eight-thirty in the morning. When we got home I gave him a hand in peeling off the hide. Despite the extreme cold and the fact that the field-dressed deer had been outside for almost eight hours, steam still came from the carcass when we removed the skin. Just think how this would have affected the meat if it were typical October weather and this was a bow kill.

The easiest way to remove the hide is to carefully cut around the hocks of



the rear leg, cut the skin from the anus to the cut around the hocks, hoist the deer on a gambrel and carefully peel off the hide. I cannot overemphasize the importance of keeping hair off the meat. Once on the flesh it sticks like glue and becomes almost impossible to remove.

Once the hide is off, cut away any damaged tissue, blood clots, and as much fat as possible. Fat is what gives any meat its characteristic taste, and it appears to be this taste that most venison haters find objectionable. If the weather is chilly, the carcass can be left hanging for a day or so until it is butchered. Often though, the weather is warm. This presents a problem. I have a spare refrigerator in my basement, so I can quarter the deer and place it in the cooler until I am ready for the next step. If you don't have such a facility, I suggest you get your deer to a meat processing plant as soon as possible.

Two factors can change the flavor and texture of any meat. One of these factors is bad, the other good. The first is bacterial contamination. As indicated earlier, its effect can be diminished by careful handling in the field and attention to cleanliness. The second factor, which affects the texture of the flesh, is enzyme action. Enzymes are chemicals present in all food. Their action results in a process of self-digestion called autolysis. Autolysis occurs naturally within plant and animal tissue after separation from the organism to which these tissues belong. Example can be seen in fruit after picking or in meat after slaughtering.

This self-digesting process breaks down animal tissue and improves the flavor and texture of meat if it is carefully and properly controlled. A happy medium should be struck in the aging process. I like to age venison either at

home or at a meat locker for two or three days. The aging process should not be carried on too long or the meat might begin to spoil.

The best venison, I believe, is obtained when the entire deer is boned out. This requires some expertise, and I prefer to leave this job to a professional butcher. This procedure adds to the expense; however, I feel it is well worth it because there is no marrow, fat or bone chips on any of the meat.

For my money there are only four ways to have venison prepared—as boneless round steak, cube meat, boneless butterflied chops, and ground meat. These cuts can be used in dozens of recipes. Venison is a lean meat, so I ask that 20 percent beef fat by weight be added to the ground meat. By doing so, I get a product that is superior to most commercial hamburger. I have no use for roasts, so I get my cubed stew meat from these cuts. When I pick up my meat, it is cut to my specifications, wrapped and frozen. Some might feel the cost isn't justified. I am prepared to battle that argument in the kitchen. Some things are worth paying for. This service is one of them.

Venison treated and cut in the way I have described can be used whenever or however a recipe calls for that particular cut of beef. Proper handling of the meat is the first phase for prepar-



**HOW YOU handle the carcass from this point on will have a great deal to do with your enjoyment of the meat at a later time.**

ing outstanding table fare; proper cooking is the second.

I would like to state unequivocally that I have no secrets about cooking game. There are, however, some people who think otherwise. I can offer only a few suggestions which, if followed, will result in delicious meals anyone can be proud of. The person who begins by soaking venison in salt water, vinegar and water, or in anything but a flavoring marinade, should be jailed. These same persons would never think of doing that to a filet mignon or to a sirloin steak, yet they casually soak a piece of venison like it was a hunk of freeze dried trail food. Venison steaks are extremely lean. To pan fry meat of this type generally results in tough overcooked meat. Some individuals may prefer that, but I'm not one of them. I use practically all my venison steaks in two ways. The first is in a moist sauce, such as in the following recipe.

### **"Beef" Stroganoff**

- 1 venison steak
- juice of one lemon
- cooking oil
- 1 medium onion, sliced
- 1 cup sliced fresh mushrooms
- 3 tbs. flour
- 1 cup sour cream
- 10 small black olives, sliced
- 10 small green olives, sliced

Trim all fat from venison and cut into thin strips. Place meat in small bowl and sprinkle with lemon juice. Meat can be prepared several hours ahead of time to this point.

Sauté onion in 3 tbs. cooking oil (I prefer olive oil), over moderate heat, until onion begins to brown. Remove onions and reserve.

Place 3 tbs. flour and venison strips in paper bag and shake until meat is lightly coated. Add 3 tbs. oil to the pan; when hot, quickly add meat and stir lightly until cooked, usually 2-4 minutes. Add onions, mushrooms, and sour cream. Stir 2 minutes. Salt and pepper to taste. Place in warm serving dish and garnish with the sliced olives. Commercial rice mixture will complement dish nicely. Serves 4.

The second way I use my venison steaks is in Chinese cuisine. Chinese cooking is easy. It blends various flavors, colors, and textures to make even the most discriminating of diners ask for seconds. Dozens of Chinese cookbooks are available. Beef with Hoisen sauce, stir-fried beef with bean sprouts, beef with asparagus, and beef with snow peas and almonds are just a few of the easy and tantalizing dishes that can be prepared by even the most timid chef, substituting venison for the beef. Don't worry about exotic ingredients. Any fresh garden vegetable can be substituted in most recipes. Broccoli, chard, green beans and zucchini are only a few of the vegetables I use in Chinese cooking. Most large grocery stores near larger cities now carry such exotics as Bok Choy, a tasty cabbage type, and snow pea pods, which are eaten whole. The following recipe is sure to receive accolades from the entire family.

### **Chinese "Beef" with Vegetables**

- 1 venison steak sliced into strips as thin as possible
- 1 clove garlic, chopped
- 1 can water chestnuts, sliced
- 5 green onions sliced, including green part
- 15 fresh green beans cut into 1½-inch slices and blanched for 3 minutes.
- 1 small red pepper cut into inch cubes
- 1 small green pepper cut into inch cubes
- 2 tbs. sherry or other wine
- 1 tsp. sugar
- 5 tbs. soy sauce
- 2 tbs. cornstarch dissolved in 4 tbs. water
- 6 tbs. cooking oil (peanut oil preferred)

Place sliced venison, garlic, sherry, sugar and soy sauce in a bowl and marinate for one hour, longer if you prefer. Heat 3 tbs. of oil in a heavy skillet and add water chestnuts, green beans, and the red and green peppers. Cook for one minute, tossing lightly. Remove from the pan and add 3 tbs. cooking oil. Heat until smoking. Add venison and cook until done (about 2 minutes). Add reserved vegetables and toss. Thicken sauce in bottom of pan with cornstarch mixture and toss. Serve over steamed rice. Serves 4.



The cubed venison can be used in the classic dish, venison stew. Every household has its favorite stew recipe and I won't go into details here. However, if your family likes to barbecue in the summertime, the following recipe should quickly become a favorite.

### Spiedies

- 1-2 lbs. cubed venison trimmed of all fat
- 1 cup salad oil
- ½ cup cider vinegar
- 2 tbs. salt
- 1 tsp. black pepper
- 1 tsp. poultry seasoning
- 1 egg, slightly beaten

Place all ingredients except venison in a container and shake. Pour dressing over the cubed venison and marinate overnight or longer. Skewer meat, placing 6-8 pieces on each skewer. Grill over hot charcoal until meat is browned on all sides. Don't overcook or meat may become tough. Serve sandwich style with cold drinks. Be ready for the calls for seconds.

All of these recipes are excellent.

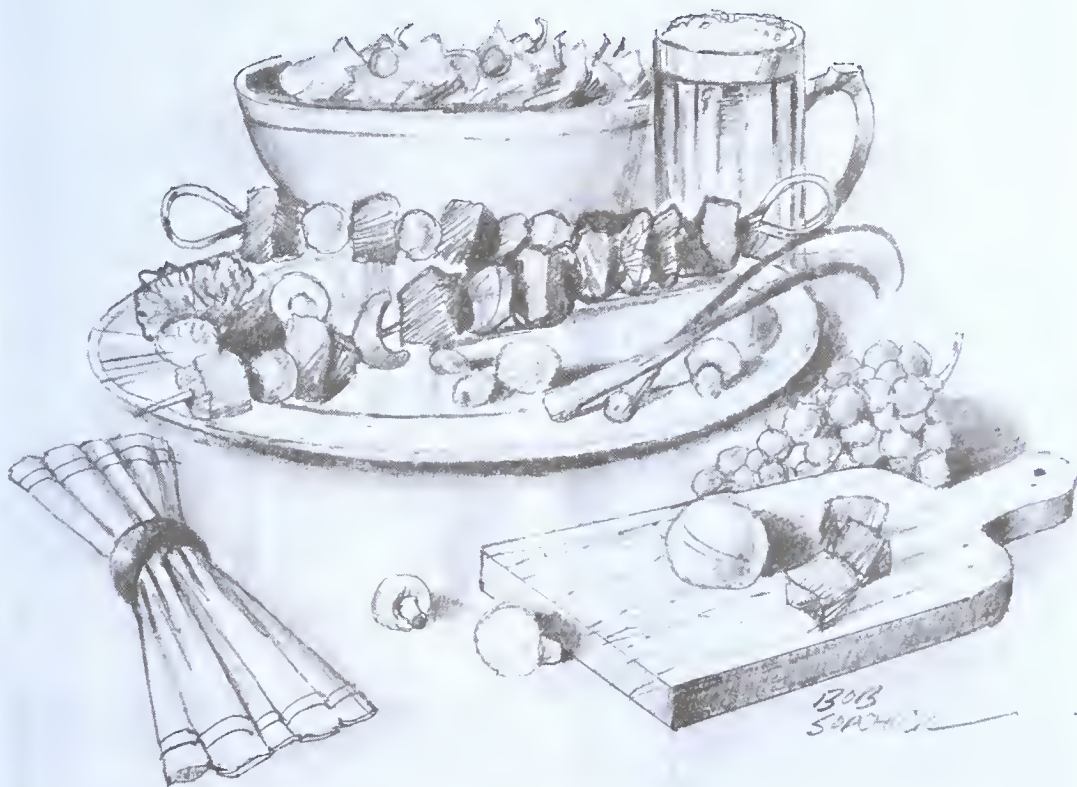
They utilize all the fine qualities of venison. But for the pièce de resistance we must turn to the butterflied venison chops. They are the essence of simplicity to prepare.

### Grilled Venison Chops

- 4 butterflied venison chops, cut one inch or more thick
- ½ cup olive oil
- 3 cloves garlic minced fine

Place garlic in olive oil and pour over chops. Marinate several hours or overnight. Grill over very hot charcoal fire until meat is browned on both sides but not overcooked. Serve rare or medium rare. This is a meal fit for a king.

As I said earlier, there is no secret to cooking venison. A basic knowledge of cooking, a slight amount of creativity and good meat are all that is necessary for producing outstanding meals long after the close of deer season. This season, if you are lucky enough to bag a whitetail, consider my suggestions and see if you don't agree.



The Bureau of Land Management's . . .

# Branching Responsibilities

By Bob Mitchell

Assistant Editor: GAME NEWS

**T**HE Pennsylvania Game Commission's initial efforts to protect and restore game populations and provide areas for public hunting were covered last month. After meeting with various degrees of success establishing wildlife refuges and public hunting grounds on leased State Forest Lands and private properties, the Commission received approval from the Legislature to purchase lands for these purposes.

The first State Game Lands was a 6288-acre tract purchased in 1920 for \$2.75 per acre. Sixteen years later, the agency owned a hundred tracts totaling 507,406 acres, and by 1965 over a million acres had been acquired. Today, just 65 years after the agency began buying land, 276 tracts totaling 1,290,282 acres are owned by the Commission and managed specifically for wildlife and outdoor recreation.

That the agency has accomplished the challenges set before it at the time it was established is irrefutable. In the course of the past 90 years, game populations have rebounded to where sustained high harvests are enjoyed annually, and extensive networks of public and private lands are accommodating the needs of both wildlife and nearly 1.3 million sportsmen. The past 90 years have brought other challenges, however, giving the agency a wide variety of modern day goals and responsibilities which we are continually striving to satisfy. Just how the agency meets many of these demands will be introduced here and covered more extensively in coming issues.

Over the past several decades an environmental awareness has developed among the general public, spawning a growing concern over how our environment is being affected by modern land use practices. Consequently, many federal, state and local laws have been enacted to safeguard our environment from abuse.

The job of enforcing and monitoring many of these environmental regulations has been accepted by the Game Commission, and is handled through the agency's Bureau of Land Management.

The Bureau of Land Management, in

**THE BUREAU** of Land Management, made up of a wide variety of natural resource specialists, is charged with many responsibilities designed to protect our environment and our wildlife resources.





many respects, is the largest of the commission's six bureaus. More employees work within this bureau than in any of the other five, and its operations account for over 40 percent of the agency's total budget.

This bureau is administratively organized into nine divisions—Real Estate, Game Lands Planning and Development, Forestry, Federal Aid and Public Access, Federal-State Coordination, Environmental Impact Assessment and Minerals, Wildlife Planning and Development, Engineering and Contract Management, and Support Services.

Activities of the bureau are directed by division chiefs in Harrisburg and coordinated through land management and federal aid supervisors in each of the Commission's six field regions. Within each field region are four to six land managers (28 in the state) who are responsible for all land management activities within assigned management units. Each unit encompasses from two to four counties. Each land manager supervises a Food and Cover crew, and it is these men and women who accomplish much of the wildlife habitat management work conducted in the state.

Early in the Commission's land acquisition history, it became apparent that selfish and conflicting motivations could arise if land purchase dealings were assigned to outside agents. Consequently, the Game Commission maintains its own staff of real estate specialists to conduct all facets of land acquisition. Attorneys, abstractors, surveyors and cartographers make up the Bureau of Land Management's Real Estate Division. They are responsible for certifying clear and marketable titles before Commission land purchases are finalized. They must establish indis-

putable boundaries, and ultimately map each of the agency's holdings. Every sportsman who has purchased or used a State Game Lands map has taken advantage of the fruits of this division's labor.

Years ago the Commission was unable to develop and implement management plans as rapidly as lands were acquired. Not today. Through the Division of Game Lands Planning and Development, policies have been developed and long term management plans prepared for each of the 276 State Game Lands in the commonwealth. These plans are based on sound ecological wildlife management principles, and designed specifically to provide the needs of wildlife and outdoor recreationists. Each land manager, working closely with members of the Soil Conservation Service, develops and implements management plans for Game Commission properties in his unit. This division also has responsibility for Howard Nursery, where over three million tree and shrub seedlings are produced annually for planting on Game Lands, other public lands and on private properties.

The vast majority of State Game Lands are forested, and therefore managed according to proven and accepted forest wildlife management principles.

**TIMBER MANAGEMENT** is a key component in Game Lands plans. By conducting regulated timber sales the optimum variety of habitats is maintained, ensuring the needs of all wildlife are being met.

AUGUST, 1985





**OVER three million seedlings are produced annually at the Game Commission's Howard Nursery. These trees and shrubs are planted on Game Lands, other public lands, and on private properties.**

The PGC employs 40 foresters and forest technicians who work within the Division of Forestry to maintain detailed forest inventories and direct forest management plans and related activities. These professional foresters continually assess Game Lands to develop management plans that best serve wildlife. By designating areas for regulated sales of timber on State Game Lands, the agency is providing the optimum habitat diversity of seedling, sapling, and timber stages to best meet the needs of all forest wildlife species.

The Federal Aid and Public Access Division encompasses a wide range of programs vitally important to both wildlife and sportsmen. All federal funds received by the Commission are processed through this division. Over the past five years the agency has received an annual average federal appropriation of \$4,682,415. This accounted for nearly 16 percent of the agency's total budget.

Most federal monies are Pittman-Robertson funds derived from 10 to 11 percent excise taxes on shooting and hunting equipment. These funds are distributed according to each state's total land area and number of hunting licenses sold. Pennsylvania, because of our 1.3 million licensed hunters—and despite our ranking of 33rd in total land area—receives larger PR allocations

than any state except Alaska and Texas. In Pennsylvania, all PR funds are currently used for land acquisition and wildlife habitat development.

Perhaps more apparent to state hunters is the division's management of the Farm-Game, Safety Zone and Forest-Game projects. These programs involve various lease arrangements between the agency and cooperating landowners. In exchange for providing access to hunters, landowners receive various incentives from the agency. Providing wildlife habitat needs and public access on private lands has always been a major agency objective. The basics of these three programs were instituted in 1936. Today, hunters have access to over four million acres of farmland and over 600,000 acres of forest, thanks to the generosity of over 28,000 cooperators. More on how wildlife and sportsmen are served by these programs will be covered in an upcoming article.

In recent years there has been a tremendous increase in the number of governmental agencies and organizations with vested interests and concerns in Pennsylvania's natural resource management programs. Through the Bureau of Land Management's Federal-State Coordination Division, liaison is maintained with countless federal, state and local government agencies and private organizations.

For example, projects conducted in Pennsylvania by the U.S. Department of the Interior, National Parks Service, U.S. Department of Agriculture, and Army Corps of Engineers are all coordinated through this division. This division also assesses wildlife-related impacts from hydroelectric development licensed by the Federal Regulatory Commission. And the list goes on. Numerous sportsmen feel wildlife doesn't receive adequate consideration in many land use decisions, but through this division there's a voice for wildlife and wildlife enthusiasts on major projects and practices conducted in the state.

Resource Specialists in the Environmental Impact Assessment and Miner-



**HUNTERS** enjoy access to over 4.5 million acres of private land, thanks to 28,000 landowners enrolled in the Farm-Game, Forest-Game, and Safety Zone cooperative programs.

als Division assure wildlife protection provisions are being met on all development projects involving National Environmental Policy Act standards or requiring state or federal permits. Specialists accomplish this by reviewing project designs so wildlife losses are kept to a minimum, and by arranging adequate compensatory arrangements when and where wildlife losses are unavoidable.

Because of the large variety of potential effects on wildlife, monitoring and assessing the impacts of development projects throughout the state are complex responsibilities. Many of the laws regulating environmental impacts of construction and development projects were enacted years — in some instances, decades — ago; but it's taken natural resource specialists much longer to develop the criteria, procedures and baseline data needed to adequately enforce these laws and regulations.

### **Over 40,000 Acres**

For several years, members of this division, working with representatives of the Pennsylvania Fish Commission, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service have been developing procedures which accurately determine habitat losses associated with construction and development projects. This system, called PAM-HEP, (Pennsylvania Modified Habitat Evaluation Procedure) will facilitate the environmental reviews of highway relocation and construction projects, and will enable division personnel to more quickly assess losses associated with stream and wetland encroachments, and solid waste disposal sites, and help implement wildlife considerations on stripmine sites and reclamation projects. In Pennsylvania, over 40,000 acres of undeveloped land are converted an-



nually to shopping centers, housing developments, industrial complexes and other uses which adversely impact on wildlife. This program is designed to minimize and wherever possible compensate for these losses.

Extraction of coal, oil and natural gas from State Game Lands is also handled within this division. Over the past five years an annual average of \$779,000 has been earned from coal sales. Leasing oil and natural gas rights, and associated royalties, have added an additional \$116,000 a year to the Game Fund. As with timber sales and other practices conducted on State Game Lands, wildlife considerations always come first; monetary gains are a side benefit and a sign of wise land management.

To more fully meet state and federal regulations, and accurately assess environmental costs associated with these types of projects, the Commission recently created the Wildlife Planning and Development Division. In this division is a computer system containing a wealth of information on Pennsylvania's wildlife and fish. With this Pennsylvania Fish and Wildlife Data base, the Commission is now able to quickly provide detailed information to other agencies and private industries on the types of animals found in defined areas of the state. Having ready access to such information enables resource agencies and private industries to cooperatively design and build construction projects so they have minimum detrimental effects on the environment.

The Engineering and Contract Management Division designs, specifies, and

coordinates all construction and maintenance work contracted to commercial contractors. Civil engineers in this division are primarily involved with writing specifications for construction of new buildings and bridges and remodeling old ones. They interact with outside contractors to make sure all construction work is performed to agency specifications and meets the Commission's needs.

The Support Services Division is responsible for purchasing and maintaining the entire agency's fleet of vehicles and heavy equipment, and for purchasing all of the Bureau of Land Management's supplies. Although most activities accomplished through this division don't directly influence land management programs, indirectly they result in a smooth and efficient operation of this large bureau's many responsibilities.

To reiterate, environmental concerns and pressures have grown immeasurably through the '60s, '70s and '80s, and have placed increased demands and responsibilities on the Pennsylvania Game

Commission to monitor, assess and protect the state's wildlife resources from a wide variety of abuses. Most of these assessments are the responsibility of the Bureau of Land Management.

Just as the Commission's accomplishments achieved over the past 90 years couldn't have been imagined in 1895 when the agency was formed, neither could the challenges facing it today. But the Commission has grown to meet today's challenges and will continue to do so.

The first article in this series covered the birth of the agency and early attempts to provide for wildlife and hunters. This one dealt with an administrative examination of the Bureau of Land Management, highlighting the broad range of responsibilities to protect wildlife and serve all citizens of the commonwealth. In the next article, the State Game Lands program will be covered, with emphasis on properties being acquired today, and we will tell how the entire network of Game Lands is being managed for many kinds of outdoor recreation.

# GAME NEWS

Enclosed find check or money order for \$\_\_\_\_\_ for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW    ☐ RENEWAL    \_\_\_\_\_ ACCOUNT NUMBER

(Check One)

In U.S.    ☐ 3 Years \$16.50    ☐ 1 Year \$6.00

To Canada and all foreign countries  
☐ \$7.00 per year in U.S. Currency

Name \_\_\_\_\_ (print plainly)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ (Zip Code)

NOTE: All remittances should be made payable to the  
PENNSYLVANIA GAME COMMISSION  
Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
DO NOT SEND CASH

Please allow 60 days for first copy.





**SUCCESSFUL** raccoon trappers have learned that tracks on a streamside sandbar don't necessarily mean a surefire score.

# COON CONCENTRATION

By Joe Kosack

**R**ACCOONS show up in the strangest places. Just when you think you've got them figured out, they disappear. I believe that's why so many of them are missed during the first week of season. Learning to trap raccoons is never totally understood. It is an art that is rarely realized for what it is. Each year, even the professional is taught a trick or two by the crafty critters.

Growing up on a farm, I had my share of problems with the elusive masked bandits. "All you do is make sets where you find tracks along the creek," said my trapping friends.

For some reason this boyhood gospel didn't seem to offer me any rewards—except maybe quarter possums. The more time I put into my sets along the creeks, the more my frustrations grew. I wondered what I was doing wrong.

The years passed, and so did the coon, until I was able to overcome my problem. The solution was simple, now that I look back. The answer—you've

got to have coons to trap in order to catch coons. And to expand on the formula, you've got to have big raccoons in order to catch big raccoons. Obvious? Well, maybe. But if it's such common knowledge, why do so many trappers continue to have such a hard time catching them?

For many trappers, coon tracks on a sandbar signify a surefire score. A lot of these optimists stop seeing that vision after they check empty sets for a week. Of course, the trapper blames the lure, or bait, or set, or location, or himself; but rarely the raccoon.

Yes, raccoon trapping can be hard for those who have ego problems and hopeless for those who are impatient. They're tricky, those raccoons! Some attribute the elusiveness to the raccoon's intelligence. Others say it's the animal's lifestyle. But one thing's for sure. With proper knowledge, the raccoon's movements can be predicted—at least to a certain degree.

In the fall, the raccoon is a virtual beehive of activity. He's got a deadline to meet and only a blizzard seems able to stop him. Food is his top priority — lots of it! I don't have to tell you what a raccoon eats, but I will say there isn't much that he won't. In November, he's a galloping gourmet of the forest, constantly zipping from one food source to another. One night he'll be cracking acorns up on the ridge, the next night he'll be stuffing himself with crab apples or grapes. As soon as he tires of fruit, he may head to the cornfield to scavenge, or hunt mice and frosted grasshoppers.



Fall is good to the raccoon. It's probably his finest hour. For two months, the raccoon does nothing more than tour the surrounding area, eating whatever the land has to offer. Take note, I did say land. They know they're not going to get fat following the creek in the fall.

Older raccoons are usually the first to shift their dependency for food away from the creeks in the fall. Some yearlings tag along if they still have a mother (traffic, dogs and disease take their toll on parents).

With the disappearance of frogs from the shores and minnows from the shallow pools, the raccoon begins to experience the difficulties that cooler weather

presents. The older ones know it's time to move on, but yearlings are lost in the revolving environment. They continue to work the summer haunts for food that's quickly disappearing.

These yearlings are stuck in the only place they were ever taught to look, the water courses. They rarely survive the winter as they never accumulate enough fatty tissue to endure long periods of cold weather. Until they die, they search the barren wetlands, regardless of how cold it gets. Food is essential for stamina and existence.

That's the way it is along the waterways where the young coons gather and where most of the trappers pursue them. Sure, older raccoons also stroll along the creeks occasionally, but they do so out of normal curiosity and the familiarity of a travel route, not for food.

**RACCOONS show up in the strangest places. Orchards, grapevine tangles, chop-offs and dumps are a few of the areas they visit in the fall.**

So then, in order to catch larger raccoons and hopefully avoid the smaller ones, the trapper must not confine his activity to the water. Land trapping will open the door to unlimited production. Of course, you've got to put more time into prospecting for raccoons on land, but the results are worth the effort.

Where does a trapper hunt for the raccoon's haunts on land? Some locations are obvious. Orchards, grapevine tangles, chop-offs, dumps, and cornfields all attract coons. But don't overlook debris piles, large rock formations, deer trails deep in the woods, and sectors of oak trees. As I said in the lead, raccoons show up in the strangest places — and I meant it. The experienced trapper always keeps his eyes open for raccoon sign because he knows how unpredictable the travels of this critter can be.

Location can be almost anywhere for the raccoon trapper. Of course, some of the trapline should consist of water sets,



but land sets should not be avoided. Bear in mind, though, to consistently catch raccoons you've got to set your traps near fresh sign and in a variety of habitat. Sure, there are occasions when you should consider setting traps near old sign, but these are few and far between. A prime example would be setting traps near a raccoon dung pile.

Success is strictly dependent upon setting traps in the vicinity of fresh activity. This alleviates the wait, unless the raccoon is switching from one feeding area to another when you're placing the trap in the ground. But that's how raccoon trapping is, a challenge of variables. Just when you think you've got one nailed to the stretching board, he slips away from you.

Once you've located an area where raccoons are feeding or traveling, set your traps quickly. Sets don't have to be elaborate, but if there's a lot of activity you might want to consider gang trapping. That is nothing more than placing three to five sets in one specific location. Just be sure there is enough sign to justify the effort and use of extra equipment.

When gang trapping, basic sets such as dirt-holes, cubbies (in areas of limited human activity) and pocket sets will usually get the job done. Avoid repetition in your set and bait selection. Creativity and common sense should prevail. Mature raccoons aren't stupid, so give credit where credit is due or you'll learn the hard way to respect them.

After you've covered the specific feeding area with sets, look around the surrounding area and try to determine the travel routes they are using to get there. Usually they'll follow the edge of the woods, paths, dirt roads, the crest of a hill, or a nearby waterway. After you've found their highway, dig out your ace in the hole, the blind set.

The blind set is designed to catch the raccoon off-guard. It is placed in a narrow or funneled area along his natural travel route. No bait is used, so the raccoon can't be tipped off. The narrow area can be man-made, but

## Cover Story

Nurturing a pup from its first interest in game to a devoted, hard working partner in the field is one of the greatest joys a hunter can experience. It's not easy and it's not always fun. But the special bond that develops between a hunter and his canine companion after years of working together as a team in the field is, for many, the most important aspect of the hunt.

construct it before season so wildlife in the area will become accustomed to it.

Guide sticks can be used to persuade the raccoon to step exactly on the hidden trap. Don't worry about tipping off the raccoons with your guides; they step over sticks every day of their lives.

When setting traps in secluded areas, try to be slightly original in your set construction. Concentrate on natural looking sets. In other words, no log cabin cubbies. A good set in remote areas is a dirt-hole baited with honey and hive paper scraps. Toss the hive scraps around the area to make it appear some lucky skunk had pawed out a tasty treat. Add a dab of skunk essence to the backstop and the set will beckon every fox in the area too.

Don't be afraid to experiment with baits. I've caught coons on everything from fox urine to pork chop scraps. Variety is the key, stereotyping is a pit-fall. But if you're going to experiment, find out before the season which baits are successful. After all, it's no fun determining how useful or useless a bait is when you're expecting a return for your trapping efforts.

A lot of hoping and wishful thinking go into trapping masked bandits, but if you do your homework you'll usually be successful. Raccoon trapping is like that—no guarantees. Sometimes you hammer them, other times they hammer you. The thing is to be prepared, have your sets dispersed, and be patient. Otherwise you'll be pulling out your traps and your hair quicker than you think!

# ***THE AFFLICTION***

By Paul A. Matthews





OLD MYERS was in bad shape. I mean he was downright sick—the sickest he'd ever been in his life. And the worry that went with it upset his whole system. He didn't eat right and he didn't sleep well at night because he just lay there in the darkness staring into oblivion and thinking about his problem. Never in his life had he heard of such a thing, and because he had never heard of it before, who was to say there was a cure?

Doc Lyons?

Yes, Doc Lyons just might know. He'd been around as many years as Old Myers—in fact, they'd gone to grade school together. And at the end of the eighth grade, Myers went to work in the sawmill and Doc Lyons' folks moved to town where Doc could attend high school and then go on to study medicine. Doc was doing army internship in a hospital in France on the day they brought Myers in off the field with two or three 8mm perforations through his hide and a few pieces of Krupp scrap iron imbedded in his leg. Yes, Doc Lyons would understand.

And that's how it happened that on Tuesday, December 28, 1965, Old Myers put on his best clothes and walked the four and a half miles to town to see Doc Lyons. Pushing through the door of the waiting room about 10:15 that morning, Old Myers stomped the snow from his boots and looked nervously at the other patients around the room. With the exception of three small children, they were all ladies, and to a person, their eyes seemed riveted on Old Myers.

"Can I help you?" It was the young nurse who spoke from behind a desk, and immediately Old Myers swept his Woolrich cap from his head and crossed the room in three easy strides.

"I'd like to see the doc," he said.

The nurse smiled and rustled some papers from the desk drawers. "Your name, please?"

"Myers. John Myers."

"And how old are you, Mr. Myers?"

"Seventy."

"Where do you live?"

With a strong hint of nervousness in

his voice, Old Myers explained. "I have a shack up along the crick—Mallory Run."

"No, no. I mean your address."

Myers told her.

"And have you ever seen Doctor Lyons before?"

"Why, shore! We growed up together. Why . . ."

The nurse smiled at him, shaking her head. "No, Mr. Myers. What I mean is, has Doctor Lyons ever treated you before?"

"Yes. Onc't. Over in France."

She hesitated, biting her lower lip and finally putting an "X" in the proper box on the paper. "I didn't know that Doctor Lyons had ever practiced in France," she said. "And when did you have your last checkup?"

"My last checkup?"

"Yes. A physical examination?"

Old Myers thought for several moments. "Let's see now," he muttered. "We declared war on the 6th. Yes," he said, "it was April 7, 1917."

### Strained Silence

For a long period of strained silence, the nurse simply stared at him—her mouth partly open, her eyes wide. Somehow, she thought, it must be a joke. And yet the old man standing in front of her seemed dead serious. She almost feared her next and last question. "Mr. Myers," she asked softly, "what seems to be your problem?"

And at this, Old Myers stretched his gaunt frame to its last quarter-inch and explained in no uncertain terms that he wasn't about to discuss his problem with a lady. That was why he had come to see Doc Lyons.

Greatly relieved, she smiled. "Please have a chair, Mr. Myers. The doctor will see you soon." And with that—and a worried frown—she took the form she had just filled out and went into Doc Lyons' inner office. Three minutes later, Old Myers was in the inner office shaking hands with the doctor and discussing the latest turn in the weather.

"And how was your hunting season this year, Myers?"

"Wonderful season, Doc. Wonderful season. Sometimes it ain't quite like it us'ta be, but I wouldn't miss it fer . . .," and then he hesitated and the worry lines furrowed their way across his forehead. He leaned forward and looked Doc Lyons straight in the eye. "That's my problem, Doc. That's what I come to see you about."

Doc Lyons nodded and, after rummaging amid bottles of pills and ointments and pads and bandages, he fetched up a high-grade Corona cigar, fired a blue-tipped kitchen match to it, and blew a cloud of smoke toward the ceiling vent. "Tell me about it," he said.

"Well, Doc, you know I like to hunt, 'specially deer. An' you know I don't just go in the woods with a rifle that shoots into the next country an' a powerful scope sight that helps see it there, and then sit with a thermos of coffee waitin' to ambush the first buck that comes along. You know I leave the house 'fore daylight an' I poke the brush all day long an' sometimes don't get back 'til long after dark."

Doc Lyons rolled his cigar in his mouth and fired another puff of smoke ceilingward. "Yes," he said. "Not many men walk like you do while they're deer hunting. Do you still carry that old Rolling Block 45-70?"

"Nicest deer rifle I ever owned. 'Specially when you load it with some of

these smokeless powders they've got nowadays an' a good, soft lead Gould hollow-point bullet."

"Get your buck this year?"

"That's the part I'm comin' to, Doc. That's my problem."

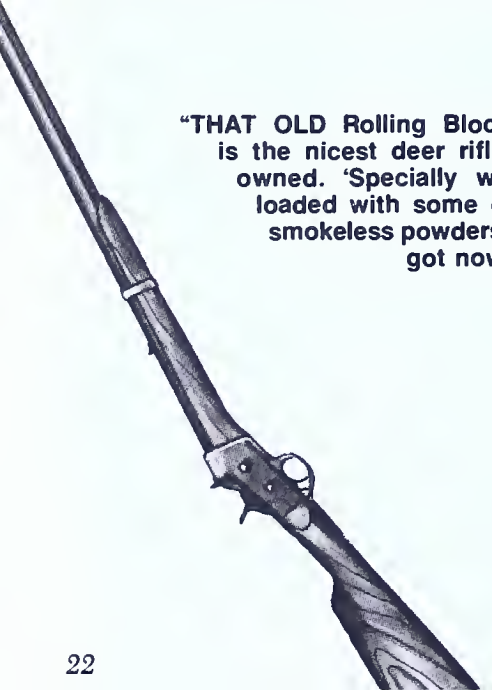
Doc Lyons nodded and sucked on his cigar while Old Myers went on with his explanation.

"I'd been watchin' this buck all summer an' fall, Doc. He was a big'un—about 12 points as best I could judge—an' he was stayin' way up the crick bed in that laurel thicket just below the old Chandler barn. That's pretty close to some cornfields an' old apple orchards, so he didn't have far to go fer food an' he's got darned good cover in that five-acre laurel thicket. Nobody can get in there without him knowin' it. An' even when they drive the place, he just seems to flatten out on the ground someplace an' they never do scare him up.

"So I figgered I wouldn't go after him the first week of the season. I'd wait until things quieted down—until the fair-weather boys got tired of huntin'—an' then I'd go after him. I waited until the last Friday of the season. It rained that day, started in about four o'clock in the morning, a slow drizzle that settled the snow underfoot an' made fer quiet walkin'. An' a fresh deer track stood out like a mud pie on a white-washed board fence.

"I left the shack just before daylight that morning. Took a couple of apples an' a box of raisins, an' then headed upstream along Mallory Run, stickin' to the north side of the crick through all them woods an' fields that are growed over with thornapples. I jumped three or four doe in the process, but other than that, didn't see a thing. 'Course I got soaked to the hide, but that didn't bother much while I was walkin'.

"When I was straight across from the old Chandler barn, I crossed the crick an' started into the laurel thicket. I never had such messy huntin' in my life, Doc. That laurel is chest high an' it was drippin' wet with rain an' heavy snow. But I knowed that buck was in there. Seemed like I could almost smell 'im.



**"THAT OLD Rolling Block 45-70 is the nicest deer rifle I ever owned. 'Specially when it's loaded with some of these smokeless powders they've got nowadays."**



IN THE mystic realm of his imagination, Doc Lyons saw Myers working through the woods, taking long, crow-legged strides as he trailed the buck mile after mile.

"I knew it was almost dead certain I wouldn't get no shootin' in that thicket—what I really wanted was to get the buck out of there so's I could trail him. So I went at it real slow an' quiet like—as quiet as I could under the sarcumstances. An' you know, Doc, as long as a deer can hear you, he doesn't worry too much—he just moves around you an' stays out of your way. But when you're quiet an' he only hears you break a twig now an' then, he gets nervous an' finally bolts.

"An' that's just what this buck did. About halfway through the laurel, I see where he'd got up from a bed under an' old blowdown an' headed up the hill toward the old barn.

"You ever try to follow a deer track through laurel, Doc? With him takin' jumps forty an' fifty feet apart?"

Doc Lyons allowed as how he hadn't ever done a thing like that.

### It Ain't Easy

"It ain't easy, Doc. But I stuck to it an' by ten o'clock I had that buck out of the laurel an' up past the old barn an' headed back downhill into Goose Hollow. You know, Doc," and Old Myers leaned forward in his chair to emphasize his point, "I trailed that buck the length and breadth of Goose Hollow an' never set eyes on him until almost four o'clock in the afternoon over on the Buckhorn."

Doc Lyons leaned back in his leather-covered swivel chair, his eyes half-closed and a thin curl of blue smoke trailing from the cigar as he visualized the events Myers had explained. In that mystic realm of imagination, he saw Myers working through the woods, taking long crow-legged strides as he trailed the buck mile after mile in a soft drizzle that kept the snow quiet and soggy. "Did you finally get the buck?" he asked.



Myers hesitated and swallowed heavily. "That's the part I'm comin' to," he said softly.

"Like I said, about three-thirty or four o'clock I had that buck over on the Buckhorn just south of the Medicine Rocks. An' do you remember that patch of pines that grows on the sidehill just below the Medicine Rocks? It looks like somebody planted a whole field of 'em there sometime years ago."

Doc Lyons nodded.

"Well, that buck headed downhill into them pines, an' I knowed there was no way I could go in the pines after him an' get a shot. I figgered he'd go in there an' stand until he heard me, an' then he'd go out the side, double back, an' come back up the side of the mountain, followin' the same track he made goin' down. I figgered he'd want to get out of them pines so's he could go back over to the laurel thicket close to the cornfields an' old orchards.

"What I did, Doc, was to follow him into the pines about a hundred feet, breakin' a branch now an' then to let him know I was comin'. An' then, just as quiet as I could, I backtracked out

## New Hunters . . . Read This

Every first-time hunter, regardless of age, must complete a hunter education course before he can purchase a hunting license. Also, a hunting license is needed to apply for a goose blind at one of the Game Commission's controlled waterfowl hunting areas, for a bear license, and for an antlerless deer license. These applications must be submitted in early fall; therefore, it is imperative that beginning hunters complete a course and obtain their licenses early enough to meet application deadlines. Don't delay. For information on dates and locations of courses, check your local newspaper, sportsmen's club, license issuing agent, district game protector, or local deputy game protector.

of the pines an' up the hill a couple hundred yards an' set down an' waited.

"Sure enough, in about twenty minutes I see the old boy sneakin' across the uphill side of the pines. An' then he started straight up the side of the mountain, followin' his own backtrail an' comin' straight to me."

Doc Lyons smiled and blew out a cloud of smoke. "That set up an easy shot for you, didn't it?"

Old Myers leaned forward. His forehead was corrugated with worry lines, his lips trembled, and when he spoke the words were scarcely above a whisper. "That's my problem, Doc. That's what I come to see you about."

"You mean because you set up an easy shot?"

"No. Not that, Doc. You see, when I saw that buck comin' up the hill, he had the nicest rack I'd ever seen in my life. An' I cocked the rifle an' set there with

the sights centered on his chest—you know, that little patch of white hair at the base of the throat. I figgered I'd let him get just as close as he wanted 'fore I fired. An' then it happened."

Doc Lyons took the cigar out of his mouth and set up straight to face Old Myers. He was serious, now—dead serious. "What happened, Myers?" he asked softly.

Old Myers almost strangled when he said it. But the words came out, a strange cry from an old man. "I couldn't shoot, Doc! I just couldn't bring myself to shoot that buck. After watchin' him all summer an' then trailin' him all that day, it was like we were kin. An' I just set there an' watched him melt into the trees an' disappear."

Doc Lyons got up out of his chair and went to the window, turning his back on Myers. He sucked on his cigar, wanting to be sure he'd have control of his voice when he spoke.

Old Myers asked a question from behind him. "Will I ever get over it, Doc? Is my head gettin' soft spots in it?"

Doc Lyons turned. "Myers," he said, "there isn't one man in ten thousand that develops the maturity you have reached. Oh, I'm not talking about age," he said with a wave of the cigar, "I'm talking about the kind of maturity where a man changes his values—where he sees something far greater than he used to see, where certain things have a deeper, richer meaning to life."

"But will I ever get over it? Will I ever be able to hunt again?"

"Certainly you'll hunt again, Myers. You'll hunt for the rest of your life. And on occasion—when you're low on meat—you'll take a deer. But will you ever get over it—will you ever put greater value on the taking of the game than on the game itself? I doubt it," he said. "I surely doubt it."





**SKILL** never eliminates the chance factor, but a hunter can tip the odds his way by learning to shoot well and becoming familiar with his equipment.

# THE TRUTH ABOUT BUCK HUNTIN'

By Richard G. Cole

**T**HE STORM had moved in from Lake Erie, blanketing the farm country of northwestern Pennsylvania under several inches of fresh snow. Even as I paused to check my direction, big flakes continued to build on my hat and collar. The scenery around me was beautiful but I wasn't here for that alone—I wanted a buck!

Well into the season and seemingly without another hunter in the vicinity, my intentions were at least noble: get close enough to a bedded buck to get a shot when he jumped. The area I was hunting was a strategically sound and brushy funnel between two large farm fields, a perfect setup for whitetails

routed out of one area and trying to get to another. But with no one stirring up the deer, that seemed of little value, or so I thought. Which was why I was making my way to the edge of a steep ravine where deer sometimes bedded in stormy weather. Then unexpectedly fate, or whatever, changed everything.

Four shots rang out from a dense stand of pines nearly a mile away. Whitetails . . . If they came my direction, I knew where they would likely cross. Running as best I could in the snow, I made my way toward a large hemlock on the downwind side of the funnel.

Five minutes went by, then ten. I was

having second thoughts about my move when I glimpsed several deer approaching in the snow. I could see that the first three were does. When they stopped to test the wind I could make out a fourth deer, but only the legs and lower body were visible. After a moment it lowered its head and I saw a rack. I raised my rifle and moved the crosshairs to the left shoulder, as he stood quartering toward me. I squeezed the trigger.

Every deer hit top speed within two strides. Streaking by, the buck—dead but not realizing it—held onto fourth place as I inserted two additional rounds through his ribcage.

A dandy buck with even points and a wide spread, he made my day. Dragging him out, I felt darn right smug. After all, I knew the geography well and had been alert to a developing situation. I had paid attention to the wind and generally played my hand pretty cool. But was the result so much my cunning—really? What if the four deer had gone out the other way, or the hunter whose shots had altered me had killed the only buck present? These things and many others were completely beyond my control. And no animal can better handle the presence

of man than a mature whitetail once he has been alerted.

While I've hunted numerous species of big game in North America, I've been a whitetail hunter most—specifically a buck hunter. For three and a half decades I've read about, observed and hunted deer; the substance of which is experience and knowledge. As I think about whitetails now, I don't reflect on a few isolated instances, but on literally thousands of deer encounters over many years in Pennsylvania.

Yet I certainly can't guarantee that I can go into the woods today and come out with a buck of any sort. Regardless of what I've learned about deer, one factor in the equation is always absent—chance. No doubt about it, luck has played a part in every successful buck hunt I've had.

### Old Notion

Still, I don't completely go along with the old notion that it's all “being at the right place at the right time.” There is no question that skill and perception definitely affect the odds, and anyone who doesn't think so is only fooling himself. My point, however, is that skill never eliminates the factor of chance.

Recently I hunted eight solid days for a big buck I knew about, putting every bit of my tactical knowhow into the endeavor. I had a great time—even came close once—but never fired my rifle. Hunting a particular buck fairly, honestly and without the help of others is a task usually destined to fail. The buck has many advantages and a little luck can help the bottom line.

Yet luck won't happen unless you give it a chance. Vivid in my memory is the Thanksgiving Day storm of 1950. For four days and four nights snow fell and Crawford County lay under thirty



**STEVE POWELL**, the son of the hardest hunting buck hunter the author knows, dropped this trophy with a Model 70 Featherweight 270.



inches when deer season opened. I was growing up on a dairy farm and had been waiting all fall for that first day. There was no way I was going to stay home. When dawn came, I was off.

By the time I had pushed snow for 300 yards, I realized it was no use. Nobody could get a buck in that stuff. Shortly after returning to the house, my father came in from the barn. While he sipped coffee I told him of the futility of it and of my disappointment. He nodded understandingly, but nevertheless started putting on his heavy clothes. Then he reached for his 30-30. I couldn't believe it when, less than an hour later, he shot a 13-point.

My father is gone now but I still have that old Winchester. I don't use it but I'll always keep it. Every time I pick it up I remember him, all that snow, a 13-point buck, and a sound lesson.

It was years before I killed a buck in such conditions—in fact, just last fall. I was out with Ed Powell, the hardest hunting buck hunter I know. We had used up most of the season without success. On Thursday of the second week, a foot and a half of snow fell. Most of the hunters were gone, the temperature was down to 10, and walking was difficult. We kept on, driven by a force that some apparently can't understand. Then, too soon, it was the last day.

Resting by a large beech, I was contemplating that very thought when an 8-point came blasting out of a thorn thicket. When hit he disappeared completely beneath the surface of the snow. I was overwhelmed with the similarity of the incident of so many years before. Making it even better, Ed shot a 6-point a couple of hours later.

Sometimes luck decides the whole ball game. Take, for instance, the time a gang of us were at hunting camp during several days of steady rain. Almost everyone was hesitant to go out that first morning. When they did, they met me dragging back a thoroughly soaked Forest County 7-point. I had run into him ten minutes after leaving camp.

Another time, while standing on a

wide open trail talking with a Warren County hunter, a buck came loping by. I shot him, too. But for the most part I've benefitted greatly by knowing something about deer, even though the element of chance has always figured in.

However, to go on, two things are essential in buck hunting, being alert and being able to shoot well. Both are up to the hunter. Over the years I've been appalled at the number of hunters who didn't take care of their equipment, sight-in properly, and practice to become proficient with their rifles. I never have been able to understand why a hunter will spend hours—even years—enduring all kinds of hardships, and then blow it all in a moment when game is in sight because of a lack of shooting skill.

I know one fellow who has had numerous chances during the last twenty-five years. Nevertheless, he has never hit a buck. Another character of my

## **GAMEcooking Tips . . .**

### **Roasted Turkey Breast**

- 1 whole wild turkey breast
- 2 cups sweet red vermouth
- 1 large onion, sliced
- dash of paprika

Cut turkey breast in half and place in roasting pan or covered casserole dish, skin-side down. Scatter sliced onion over breast and cover with vermouth. Marinate overnight. Bring turkey to room temperature and bake, covered, two hours at 250 degrees. Remove lid of pan and turn breast pieces skinside up. Sprinkle with paprika, and roast uncovered at 350 degrees until tender (one-half to three-quarters of an hour, depending on size of breast).

Note: This is a good recipe for older birds. The slow simmer in vermouth will make anything tender. Use remaining turkey parts for soup.

**—FROM WILD GAME COOKERY  
BY CAROL VANCE WARY**

acquaintance has little luck with bucks because at the critical moment he is either caught napping or is paying attention to something other than deer hunting. It doesn't make any difference how many opportunities you have if you aren't able to capitalize on them.

Well, then, a hunter might wonder, "If you acquire good equipment, learn how to use it, study and gain insight into deer behavior, you're still missing an important ingredient. What can a guy do about luck?"

To best answer that, let me tell you another experience of my youth.

I was around 15 at the time and it was buck season in Pennsylvania. I had just consumed the best part of a day chasing whitetails all over the country. I was tired and dejected. With what little energy and enthusiasm I had left, my intention was to give up and go home—maybe forever. Walking the trail out I noticed an old man cradling a well worn rifle and leaning against a big oak.

Even as a young lad I realized such an old hunter wouldn't be persisting there in the cold had he not been there all his life. I was about to pass when an understanding look on his face seemed to draw me to him. He gently drew from me all that he must have already known. When I had vented all my frustrations, he said, "Son, the secret is to

be here, day after day, year after year. Do that and you'll get your share."

Simple as it is, that is the best single piece of advice I've ever received about buck hunting. It all adds up to patience and perseverance. Along with those two factors comes luck. The philosophy is elementary. When entering the woods, you can never predict the outcome, but if you stay home you always can. My wife will attest that I owe few failures to staying home.

There are those who think I've been disgustingly lucky. They remind me of the time I left home late in the afternoon and was back in 45 minutes with an 8-point. But such instances are rare in any lifetime. By far, most of my success has been the result of determination. If I were able to divide the bucks I've killed into the time I've spent, my score might even look pretty bad. It doesn't matter though. The experience of hunting is the most important thing anyway.

I do not mean to suggest that I've never been discouraged. But it has been during such times of dejection that the words of that wise old hunter have meant the most to me. "Son, be here and you'll get your share."

I have now been there, and I did get my share. With persistence, you can too. Then you'll know the truth about buck huntin'.

---

## Pymatuning Wildlife Programs

Scheduled subjects for the fall wildlife speakers programs at Pymatuning Wildlife Museum this year are: September 12, 7 p.m., *Pennsylvania's Elk Herd*, by PGC Biologist Jerry Hassinger; winter censusing, natural history, etc. September 14, 2 p.m., *Black-powder Firearms Seminar*, by Mark Weidner; history and use, with live demonstrations. September 21–22, 10 a.m.–6 p.m., *Waterfowl Festival*, a waterfowl film festival plus special displays and exhibits. September 26, 7 p.m., *Prehistoric Indians of Pymatuning*, by Carl Burkett; insight into the lifestyle of primitive peoples who once inhabited the Pymatuning area. September 28, 2 p.m., *Bowhunting Seminar*, by Bob Dunsey; techniques, clothing, equipment, etc., of bowhunting for big and small game. All programs are free to the public. The Pymatuning Museum is located on Legislative Route 20006 between Hartstown and Linesville a short distance south of Linesville.



# Outstanding Deputy Game Protectors—1984

*The deputies shown, one from each field region, have been recognized for their outstanding contributions to the programs of the Pennsylvania Game Commission during the past year. Their efforts are appreciated.*



**Paul D. Miller**  
Chicora  
Northwest Region



**Carl S. Burrous**  
Westfield  
Northcentral Region



**William C. Carey**  
Canton  
Northeast Region



**Scott M. Henderson**  
West Mifflin  
Southwest Region



**Johnnie G. Corle**  
Hopewell  
Southcentral Region



**Robert M. Frederick**  
Brogue  
Southeast Region

## Thoughts While Walking

*"I'm sure nobody walks much faster than I do."*

*"He can't do that," said the King, "or else he'd have been here first."*

—Lewis Carroll

# FIELD NOTES

## More To Be Done

**BEDFORD COUNTY**—How fortunate we are to live in these times and be able to witness the return of the wild turkey, the wood duck, and now the bluebird. Thanks are due to wise management and a lot of work by many people who care.—DGP Timothy C. Flanigan, Manns Choice.



## Incorrectly

**BRADFORD COUNTY**—While alleviating beaver problems, I usually end up getting wet. The other day I thought I'd stay dry because I had several boys from the FFA group at the Troy High School assist me in tearing out several dams. The boys were doing all the work, and getting wet. Then one said, "Mr. Bower, how are you going to get across?" I was standing on the wrong side of the gaping hole. I could think of two possible solutions. The first was to walk about 1½ miles out of the way; the second was to let one of the boys carry me across on his back. Dave Woodruff assured me he could carry me. And as he's 6'5" tall I assumed . . . —DGP William A. Bower, Troy.

## Poor Practice

**JEFFERSON COUNTY**—An increasingly common complaint from landowners is that by mid morning of the first day of deer season, the roads are lined with hunters. Lots of landowners who are suffering animal damages report that many hunters don't get far enough off the road to see deer, particularly after the opening hour. Road-hunting is illegal and dangerous. It also creates a poor image for hunters. Responsible sportsmen can help curb this practice by obtaining license numbers and turning them in.—DGP Don Garner, Ringgold.

## Good Signs

**ARMSTRONG COUNTY**—This spring I observed and had many reports of an excellent carryover of ringneck pheasants—roosters and hens. The Commission started a program almost two years ago to raise a better bird, and these early signs indicate the new program seems to be off to a great start. A special tip of the hat goes to the excellent work by our game farm crews. The birds I received last season were excellent in body weight and wildness. We seem to be on the right course to bring this fine game bird back to some of its former haunts.—DGP B. J. Seth, Worthington.

## How About Rustic?

**FULTON COUNTY**—While putting on a program about primitive living for the McConnellsburg School, one of the sixth-graders said I was probably the most primitive person she has ever met. My wife says "Amen" to that.—DGP Mark Crowder, McConnellsburg.



## Chronic Problem

**CLINTON COUNTY**—Last spring, in only my district, houses in five communities were damaged by bears. Damages were usually restricted to broken windows or screendoors, caused by bears attempting to enter the homes for food. The problem is getting worse every year, and I attribute it to people feeding bears at camps. This conditions bears to associate food with people and destroys their natural fear of humans. —DGP John Wasserman, Renovo.

## Foolish

**CHESTER COUNTY**—All hawks, owls, and eagles have been protected by state and federal laws for over a decade. All three prey heavily upon rodents that are harmful to agriculture. In a healthy, properly balanced ecosystem, raptors have minimal effect on small game populations. The birds of prey represent some of the most intelligent and beautiful wildlife species in the world. Eleven of our raptors fall into classifications ranging from endangered to extirpated. With all of this in mind, can anyone tell me why some slob shot an endangered osprey in my district at the end of April? —DGP Keith P. Sanford, Coatesville.

## Looking for Handouts

**PIKE COUNTY**—One day last winter a concerned sportsman stopped to report that some crows were attacking a bald eagle just up the road from my house along the Delaware River. He said the eagle was sitting on the ice, covered with blood. When I arrived on the scene, I found a lot of crows, but the eagle was not being harmed at all. As a matter of fact, there were three bald eagles there, one immature and two adults. They were taking advantage of the sucker run that was on, catching the fish and bringing them to the same spot on the ice before feeding on them. The crows, it turned out, were just trying to scavenge a few remains. —DGP Lawrence A. Kuznar, Matamoras.

## Vulture Day

For the fourth consecutive year I noticed the first turkey vulture in Greene County on March 17. —LMO R. B. Belding, Waynesburg.



## Stick To Mice

**BUTLER COUNTY**—I recently received a call from a gentleman about a strange bird in his yard. He wanted us to pick it up. It was a coot, and, due to its clumsiness on land, it was rather easy to catch. However, when his family's cat tried its stalking skills, the bird leaped into the air and landed on the cat's back, giving it a sound thrashing with its long toes and bill. The cat didn't come out of hiding for quite some time. —DGP Larry Heade, Butler.

## Popular

**CLEARFIELD COUNTY**—The thing most people read when they pick up **GAME NEWS** is Field Notes. In fact, I think many people quickly skim through them, searching for one by their local game protector. I didn't realize, however, just how seriously some people took "their" Field Notes until I heard how my nephew Lucas became so upset because his Uncle Don didn't have one in a recent issue that he had to be sent to his bedroom. I feel the pressure is really on me. —DGP Don Zimmerman, Drifting.

## Times Are Tough

**WESTMORELAND COUNTY**—At camp recently, a few of us were discussing the rabbit situation. K. D. Moore, of Latrobe, stated that rabbits were scarce last year. Despite having good dogs he managed to get only 102. —DGP B. K. Moore, Saltsburg.



## Deputy Operators

**ADAMS COUNTY**—One morning a month or so ago a problem developed in the phone lines here. My line and that of an elderly lady in a local nursing home became crossed. Consequently, she began receiving my calls. Needless to say, both she and the callers were quite surprised. For about four hours that morning she received calls about rabid raccoons, sick skunks, skunks in basements, questions about the Game Law, and who knows what else. In the meantime, for a change, my phone was pleasantly quiet except for a couple of calls from her daughter who was understandably confused when I answered. I thought the arrangement worked quite well. Maybe this will lead to a new force of volunteers to assist the Game Commission. —DGP Larry Haynes, Gettysburg.

## Teddy

**TIOGA COUNTY**—I recently tagged a cinnamon bear and her three cubs. All three cubs were black but one had a brown face and brown ear tips. —DGP John Snyder, Wellsboro.

## Now He Knows

**McKEAN COUNTY**—A local gunsmith told me about a customer who brought in a dismantled shotgun to be cleaned and reblued. After completing the work, the gunsmith was reassembling the gun and found he was missing a part. After several hours of searching, he decided to call the customer. Upon telling the customer of the problem, the customer replied, "Oh, I forgot to tell you—a part was missing when I brought the gun in." —DGP Jim Rankin, Port Allegany.

## Appreciative

**MONTOUR & NORTHERN NORTHUMBERLAND COUNTY**—While walking on Montour Ridge, I encountered an elderly man sitting on a log. As we talked, we saw deer walking through, a couple of grouse, several squirrels, and many kinds of songbirds. The old man told me how fortunate we are to have so much wildlife. When he was a kid, just the discovery of a deer track was the talk of the town. Turkeys existed only in distant counties, and pheasants hadn't been introduced yet. As I got up to leave, he thanked me for all the Game Commission had done to preserve and bring back our wildlife, and encouraged me to keep up the good work. I don't know who he was, but I'd like to use this space to thank him for a very memorable day. —DGP Daniel I. Clark, Potts Grove.

## Supplemental

**CRAWFORD COUNTY**—We have achieved another first with the bald eagles at Pymatuning. Last April we obtained an eaglet from the U.S. Fish and Wildlife Service and placed it in a nest with two others. The foster mother readily accepted the third member of the nest. In this manner, we hope to keep our bald eagle population increasing up here. —DGP Dave Myers, Linesville.



## **Ironic**

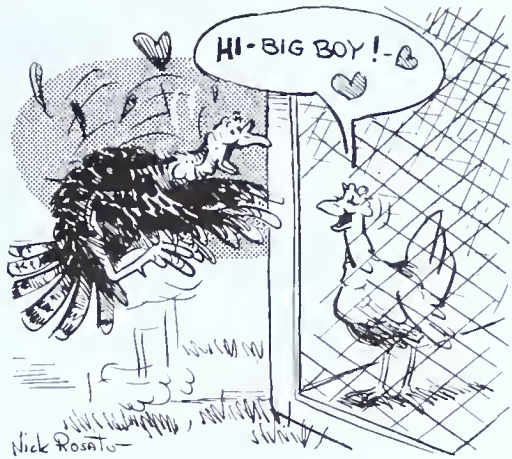
**VENANGO COUNTY**—I was called recently to remove a beaver from the concrete spillway area of Lake Kahle. The beaver was trapped in the enclosure and could not climb the spillway or the wall of the lower containment structure. Waterways Patrolman Bob Steiner and I got the beaver out. While placing it in Mill Creek we noticed that some walleyes had come upstream to spawn, but were blocked by the dam. Bob got some nets and removed 67 legal size fish and put them into the lake. This structure was built for the enhancement of nature and wildlife, but in these two instances it posed major problems for the creatures we were trying to help.—DGP Len Hribar, Oil City.



## **50 Percent**

**DAUPHIN COUNTY**—While manning the Game Commission's Working Together for Wildlife display at the Pennsylvania Flower Show, I decided to see how many people knew the name of a mammal we are attempting to restore. I covered the identifying label of the river otter and placed a small sign asking visitors to identify the animal and inquire at the desk for the correct answer. Here's the scorecard: fisher 1, badger 1, beaver 1, mink 2, wolverine 2, weasel 4, otter 11.—DGP Scott R. Bills, Millersburg.

AUGUST, 1985



## **Doesn't Work**

**LANCASTER COUNTY**—My neighboring officers here, DGP's Ted Fox and Ed Gosnell, and I have all recently received reports of wild turkeys acting strangely. I was told about a wild turkey trying to get into a chicken coop just outside the city limits of Lancaster. DGP Fox had a complaint of a turkey nesting in a backyard and attacking the homeowners whenever they walked near the nest. Investigations revealed that these turkeys were probably purchased and released by well-intending people who thought that they could start a wild turkey population in areas where no self-respecting wild turkey would be found.—DGP John A. Shutter, Lancaster.

## **Two Bright Spots**

**LEBANON COUNTY**—Many State Game Lands contain fishable streams or lakes. With this recreational opportunity comes an increased litter problem: empty bait containers, tangled monofilament line, lure packs, cans and bottles. The first day of spring gobbler season it was a pleasant surprise to see two teenage fishermen doing a little reverse littering. The fish weren't biting so these youngsters picked up the bottles and cans that were strewn about the area. It was nice to see these young men helping out so, and they were complimented for it. But it's a shame the mess was there in the first place.—DGP G. W. Smith, Lebanon.

## Big Changes

**GREENE COUNTY**—While browsing through a 1940s *GAME NEWS*, I came upon an especially interesting Field Note written by John Blair while he was the game protector here. It told how the deer herd was increasing so much that many out-of-county hunters were being attracted here to hunt. In this respect, things haven't changed much over the past forty years. But John then went on to comment on the "hot spots" for deer, and he estimated the deer population was at an all time high of 100 animals. With a current estimated deer herd of nearly 20,000 animals in the county, I'd say that, in this respect, some things have changed indeed.—DGP Stephen A. Kleiner, Waynesburg.



## People, Too

**ADAMS COUNTY**—I am often asked if honeybees are of any benefit to wildlife. They sure are. Honeybees pollinate not only many plants which are eaten by wildlife, but also others that produce seeds wildlife eats. Black locust, tulip poplar, many types of clovers, sunflower, alfalfa, red maple, soybeans, raspberry, strawberry, wild cherry, apple, buckwheat, blueberries, grapes and crownvetch are only some of them. Honeybees are definitely valuable to wildlife and people, too.—DGP Gary Becker, Aspers.

## Ceramic Wildlife

**LUZERNE COUNTY**—I was selling our seedlings at the Wyoming Valley Mall when a woman came up and asked me if there were any varieties in the seedling packet that the deer and rabbits wouldn't eat. I explained that the purpose of the seedlings was to supply food and cover for wildlife, and that we would not be able to call our program "Planting for Wildlife" if wildlife did not utilize them. She left, saying she would look for something artificial.—DGP Edward J. Zindell, Wilkes-Barre.

## Any Fish?

**SOMERSET COUNTY**—In early April, Deputy Terry Mitchell and I decided to check some areas for preseason fishermen. During our five hours afield we saw a wide variety of wildlife. Included were 2 red-tailed hawks, 14 deer, 2 Wilson snipe, 16 lesser scaup, 11 blue-winged teal, 10 bluebirds, 3 kingfishers, 2 rabbits, 2 mallards, a lesser yellowlegs, 2 woodducks, 5 turkeys and a female hooded merganser. What a day to remember.—DGP Daniel W. Jenkins, Somerset.

## Pass It On

**BEDFORD COUNTY**—More and more sportsmen are becoming fed up with illegal hunting and the bragging of those who get away with it. With all of the neighborhood crime watch programs being set up to report criminal acts, the general public is becoming more supportive of the law enforcement officer's job. Most of my investigations are initiated by information received from persons who are willing to pass along what they saw or heard. In nearly every case, there was no need for further involvement by the informant. Each investigation needs a starting place. If you see a violation or hear of one, you can provide that start.—DGP David Koppenhaver, Everett.





JACK KAUCKER, Bob Carter, Bob Brooks, Jim Brooks and Norm Gearhart will have a hard time matching the success they had last year. In the season's first two days, these five connected and the other two members in the group had their chances.

## Seasons and Bag Limits Established

**T**HE Pennsylvania Game Commission, meeting in Harrisburg, has adopted new seasons, bag limits and regulations that provide for nine turkey management areas, a split season for hunting and trapping raccoons and foxes, a two-week-only antlered deer season in the special regulations areas, and a nine-day flintlock and late archery deer season.

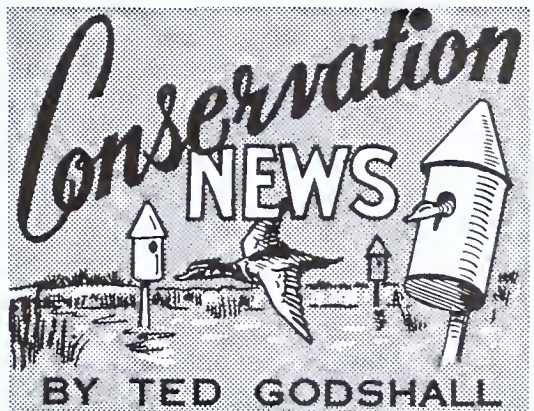
The boundary line between Turkey Management Areas 2 and 3, proposed at the Commission's spring meeting, was moved farther west after a census indicated sufficient supplies of birds in central and western Warren County to support three weeks of fall turkey hunting. The former boundary line was Route 62; the new boundary will be Route 426 from the New York line to Route 27 to Route 36. Other turkey areas are unchanged from the original proposal.

The split season for hunting and trapping raccoons and foxes will open October 28 (one week later than previously proposed) and close November 1, re-opening November 6 (five days earlier

than originally proposed). The later opening date will permit more pelts to prime up in southern Pennsylvania prior to the opener.

Only two weeks of antlered deer hunting will be permitted in the special regulations areas of southeastern and southwestern Pennsylvania in an effort to have hunters harvest more antlerless deer in these problem areas. The five-week antlerless deer season originally proposed for the special regulations areas is unchanged.

Executive Director Peter S. Duncan





**JEFFREY LERI**, Eynon, took this 476-pound bruin in Pike County, while **Butch Butler**, Harrisburg, went to Clarks Valley in northern Dauphin County for his spring turkey. The gobbler weighed over 21 pounds and had a 10-inch beard.

explained, "More deer, especially antlerless whitetails, need to be harvested in the suburban areas in the southern corners of Pennsylvania, and if hunters are permitted to hunt bucks for only two weeks, compared to the five originally considered, there is greater likelihood of more concerted efforts to take antlerless deer after the end of the regular buck season."

Forcing hunters to make a choice between an antlerless license and a flintlock license last year helped to keep the flintlock harvest within manageable limits, permitting this year's longer flintlock and late archery season. Last

year, only four days of muzzleloader hunting were scheduled.

This year, archery season opens October 5 and closes November 1. Early squirrel and grouse season starts October 19 and ends November 30, while regular small game season begins November 2 and also ends November 30. Turkey seasons range from three weeks in three areas to complete closure in one area. A two-day bear season is scheduled November 25-26. The statewide antlered deer season runs December 2 through 14, while a two-day statewide antlerless season is set for December 16 and 17.

## Seasons and Bag Limits 1985-1986

The Pennsylvania Game Commission, in Harrisburg on June 12, 1985, established the following seasons and bag limits for resident game and furbearers for the 1985-86 hunting license year which begins September 1.

Open seasons include first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds or animals (except waterfowl in the Lake Erie Zone) on November 2 will be 9 a.m. Shooting hours for other days and seasons will be from one-half hour before sunrise until sunset except turkey gobblers (spring season) from one-half hour before sunrise until 11 a.m.; raccoons, which may be hunted any hour except during the firearms deer seasons when the hours are from sunset to one-half hour before sunrise; and woodchucks, which may not be hunted before noon April 26-May 24. Seasons and shooting hours for migratory birds will be announced later.



Daily Limit	Field Possession Limit		DATES OF OPEN SEASONS	
			First Day	Last Day
6	12	<b>SMALL GAME</b>		
		Squirrels, Gray, Black, Red and Fox (combined)#	Oct. 19	Nov. 30 AND Dec. 26
2	4	Ruffed Grouse (statewide)#	Oct. 19	Nov. 30 AND Dec. 26
		(statewide)#	Dec. 26	Jan. 4, 1986
		(in 55 counties)*	Jan. 6	Jan. 25, 1986
4	8	Rabbits, Cottontail#	Nov. 2	Nov. 30 AND Dec. 26
2	4	Ring-necked Pheasants, males only	Nov. 2	Nov. 30
		(except in designated areas)**		
		—both sexes in designated area**	Dec. 26	Jan. 11, 1986
4	8	Bobwhite Quail (in 54 counties)#***	Nov. 2	Nov. 30
Unlimited		Raccoons (hunting—Pa. residents)#	Oct. 28	Nov. 1 AND Nov. 6
		(hunting—nonresidents of Pa.)#	Dec. 2	Jan. 25, 1986
Daily Limit	Season Limit			
1	1	Wild Turkey—Management Area No. 1 + +	Closed to Fall hunting except open Crawford County	
		—Management Area No. 2 + +	Nov. 2	Nov. 9
		—Management Areas No. 3, 4, & 5 + +	Nov. 2	Nov. 9
		—Management Areas No. 6, 7 & 8 + +	Nov. 2	Nov. 23
		—Management Area No. 9 + +	Nov. 2	Nov. 16
1	1	—Spring Gobbler Season	Closed to Fall hunting	
		(Bearded Birds Only, Statewide)	April 26	May 24, 1986
2	4	Hares (Snowshoe Rabbits) or Varying Hares	Dec. 26	Jan. 4, 1986
Unlimited		Woodchucks (groundhogs)#	Sept. 1	Aug. 31, 1986
			Sunday hunting prohibited	
		<b>BIG GAME</b>		
1	1	Bear—by individual +	Nov. 25	Nov. 26
3	3	Bears, by hunting party of 3 or more +	Nov. 25	Nov. 26
		(Deer, Archery Season, any deer—Statewide	Oct. 5	Nov. 1 AND
		(	Dec. 26	Jan. 4, 1986
		(Deer, Antlered, with 2 or more points to an antler	Dec. 2	Dec. 14
		( or a spike 3 or more inches long, statewide		
1	1	(Deer, Antlerless, with required antlerless license,	Dec. 2	Jan. 4, 1986
		( Special Regulations Areas listed below + + +		
		(Deer, Antlerless—Statewide	Dec. 16	Dec. 17
		(Deer, Flintlock Season, any deer—Statewide	Dec. 26	Jan. 4, 1986
		<b>FURBEARERS AND PREDATORS—HUNTING</b>		
Unlimited		Foxes—Red and Gray#	Oct. 28	Nov. 1 AND Nov. 6
Unlimited		Skunks, Opossums, Weasels, Coyotes#	Sept. 1	Feb. 28, 1986 Aug. 31, 1986
		<b>NON-GAME BIRDS</b>		
Unlimited		Crows (Hunting on Fridays, Saturdays, Sundays only)	Sept. 6	Nov. 24
			Dec. 27	April 13, 1986
			May 30	Aug. 24, 1986
		<b>TRAPPING</b>		
Unlimited		Skunks, Opossums, Foxes, Weasels, Coyotes (traps)#	Oct. 28	Nov. 1 AND Nov. 6
Unlimited		Raccoons (traps—Pa. residents)#	Oct. 28	Jan. 25, 1986 Nov. 1 AND
			Nov. 6	Jan. 25, 1986
Unlimited		Raccoons (traps—nonresidents of Pa.)#	Dec. 2	Jan. 25, 1986
Unlimited		Minks#	Nov. 28	Dec. 28
Unlimited		Muskrats (traps only)	Nov. 28	Dec. 28
6	6	Beavers (traps only—statewide)	Dec. 26	March 15, 1986

NO OPEN SEASON—Elk, Otters, Pine Martens, Fishers, Hungarian Partridges, Sharp-tailed Grouse, Bobcat or Wildcat.

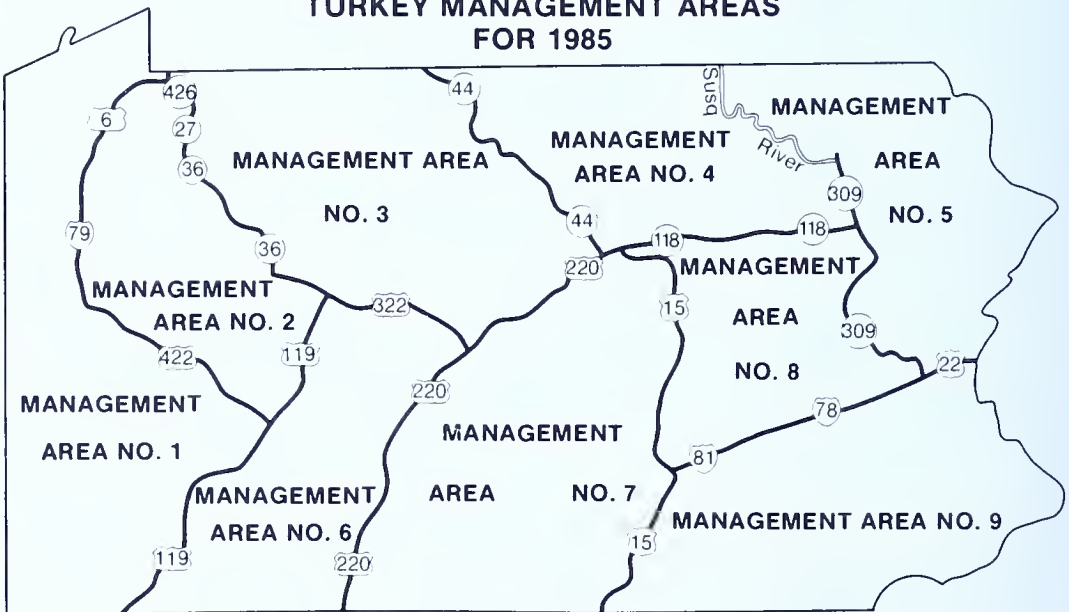
NO CLOSE SEASON—Chukar Partridges (except during general firearms seasons for deer).

FALCONRY SEASON—Details of this season will be disseminated to licensed falconers.

## SPECIAL REGULATIONS

- # During the regular antlered and antlerless deer seasons, it shall be unlawful to hunt or kill any other wild bird or animal from one-half hour before sunrise to sunset; migratory waterfowl and game birds on regulated shooting grounds are excepted. During spring gobbler season it shall be unlawful to hunt for or kill woodchucks, skunks, opossums, weasels or coyotes prior to 12 noon.
- \* Grouse hunting permitted Jan. 6–25, in all counties except Berks, Bedford, Butler, Centre, Clarion, Dauphin, Fayette, Huntingdon, Indiana, McKean, Monroe and Susquehanna, where the season is closed.
- \*\* *Designated Area for Male and Female Pheasants*—East of Interstate Route 79 from the city of Erie to Interstate Route 80, north of Interstate Route 80 from Interstate Route 79 to Route 220, north of Route 220 from Interstate Route 80 to Route 118, north of Route 118 and 415 from Route 220 to Route 309, north and east of Route 309 from Route 118 to Interstate Route 80, and north of Interstate Route 80 from Route 309 to the New Jersey line.
- \*\*\* Bobwhite quail hunting permitted Nov. 2–30 in all counties except Adams, Chester, Cumberland, Dauphin, Delaware, Franklin, Fulton, Juniata, Lancaster, Lebanon, Perry, Snyder and York, where the season is closed.
- + *Bear Season* Nov. 25–26 open only in the counties of Armstrong, Bedford, Blair, Bradford, Cambria, Cameron, Carbon, Centre, Clarion, Clearfield, Clinton, Columbia, Elk, Fayette, Forest, Huntingdon, Indiana, Jefferson, Lackawanna, Luzerne, Lycoming, McKean, Mifflin, Monroe, Montour, Northumberland, Pike, Potter, Schuylkill, Snyder, Somerset, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne, Westmoreland, and Wyoming; those parts of Berks, Dauphin, Lebanon and Lehigh Counties north of U.S. Route 22; and that part of Northampton County north of U.S. Route 22 except that portion situated east of Route 191 and north of Routes 512 and 611.

### PENNSYLVANIA TURKEY MANAGEMENT AREAS FOR 1985



- ++ Turkey Management Area 1—Bounded on the north by Lake Erie; on the east and north by the New York State line, by Route 426 from the New York State line to Route 6, by 6 from 426 to I-79, by I-79 from 6 to Route 422, by 422 from I-79 to Route 119, and by 119 from 422 to the West Virginia State line; on the south by the West Virginia State line; on the west by the West Virginia and Ohio State lines.



- + + Turkey Management Area 2—Bounded on the east by Route 426 from Route 6 to Route 27, by 27 from 426 to Route 36, by 36 from 27 to Route 322, by 322 from 36 to Route 119, and by 119 from 322 to Route 422; on the south by 422 from 119 to I-79; on the west by I-79 from 422 to Route 6, and by 6 from I-79 to 426.
- + + Turkey Management Area 3—Bounded on the north by the New York State line; on the east by Route 44 from the New York State line to Route 220, and 220 from 44 to Route 322; on the south by 322 from 220 to Route 36; on the west by 36 from 322 to Route 27, by 27 from 36 to Route 426, and by 426 from 27 to the New York State line.
- + + Turkey Management Area 4—Bounded on the north by the New York State line; on the east by the Susquehanna River from the New York State line to Route 309, and by 309 from the Susquehanna River to Route 118; on the south by Route 118 from 309 to Route 220, and by 220 from 118 to Route 44; on the west by Route 44 from 220 to the New York State line.
- + + Turkey Management Area 5—Bounded on the north by the New York State line; on the east by the Delaware River; on the south by Route 22 from the Delaware River to Route 309; on the west by 309 from 22 to the Susquehanna River, and by the Susquehanna River from 309 to the New York State line.
- + + Turkey Management Area 6—Bounded on the north by Route 322 from Route 119 to Route 220; on the east by 220 from 322 to the Maryland State line; on the south by the Maryland and West Virginia State lines; on the west by 119 from the West Virginia State line to 322.
- + + Turkey Management Area 7—Bounded on the west and north by Route 220 from the Maryland State line to Route 15; on the east by 15 from 220 to the Maryland State line; on the south by the Maryland State line.
- + + Turkey Management Area 8—Bounded on the north by Route 220 from Route 15 to Route 118, and by 118 from 220 to Route 309; on the east by 309 from 118 to Route 22; on the south by 22, I-78 and I-81 from 309 to 15; on the west by 15 from I-81 to 220.
- + + Turkey Management Area 9—Bounded on the north by I-81, I-78 and Route 22 from Route 15 to the Delaware River; on the east by the Delaware River; on the south by the Delaware and Maryland State lines; on the west by 15 from the Maryland State line to I-81.
- + + + *Special Regulations Area—Southwestern Pennsylvania—Allegheny County—*Only bow and arrow, shotguns not smaller than 20 gauge with rifled slugs or punkin balls and muzzleloading long guns may be used for taking deer in Allegheny County. Manually operated .22 caliber rimfire rifles and handguns may be used for small game (except spring gobbler season), furbearers which may lawfully be hunted, crows, predators, and while trapping. *Special Regulations Area—Southeastern Pennsylvania—*Only bow and arrow, shotguns not smaller than 20 gauge with buckshot, rifled slugs or punkin balls and muzzleloading long guns may be used for taking deer in that part of southeastern Pennsylvania bounded by the following: Beginning at the Delaware River at Point Pleasant, southwest on the Point Pleasant Pike and Ferry Road to Route 313, northwest on Route 313 to Route 563, southwest on Route 563 to Route 63, northwest on Route 63 to Route 29, south on Route 29 to Route 73, west on Route 73 to Route 100, south on Route 100 to Route 842, southwest on Route 842 to Route 82, south on Route 82 to Route 1, southwest on Route 1 to Route 41, and southeast on Route 41 to the Delaware line, including Ridley Creek State Park, Delaware County, and Tyler State Park, Bucks County. Manually operated .22 caliber rimfire rifles and handguns may be used while trapping. Hunting deer with firearms is prohibited in Philadelphia County. While hunting, use or possession of single projectile ammunition at any time other than specified above is prohibited in both Special Regulations Area.

# Antlerless License Allocations

**A**NTLERLESS deer harvests below projections for two consecutive years, coupled with lower hunter success rates in some counties, have led the Game Commission to adjust antlerless license allocations to effect larger harvests, especially in southeastern and southwestern Pennsylvania.

Studies show deer herds in southeastern and southwestern Pennsylvania are continuing to grow, and the wildlife agency is looking at additional methods of harvesting increased numbers of whitetails in these areas. The difficulty in harvesting deer in these areas is due to posted land, firearms ordinances, and urbanization.

Due to lack of access, hunters lose interest in these areas where deer need to be harvested and spend most of their time on land open to public hunting.

In 1984, approximately 475,000 permits were allocated to produce a total harvest of about 140,000 (70,000 reported) antlerless deer. This year's allocation of about 550,000 permits is designed to result in a harvest of about 160,000 (80,000 reported) antlerless deer.

Game Management Bureau Director

**LINDA MADEIRA** used a Thompson/Center single shot handgun to take this nice doe in Berks County last season.



Dale Sheffer says, "The 1985 allocations are designed to hold deer herds at present levels in 24 counties, and permit expansion in 21 counties. In the remaining 21 counties, we hope to reduce population levels.

"In most northcentral counties, we have reduced the number of antlerless licenses this year. The reductions do not mean the herds will be permitted to expand; they will merely be held at present levels.

"Whitetail herds in most northcentral counties are slightly above the current carrying capacity of the range, and in time we will need to make further adjustments," he said. "Right now, we are just trying to maintain population levels."

## Additional Measures Considered

But Sheffer went on to point out deer populations in most southeastern and southwestern counties are running well above goals. Therefore, antlerless licenses have been increased and additional control measures will be considered for subsequent years, if necessary.

The game management director explained that in 1979 the agency instituted a management plan whereby the overwintering herd in each county is tailored to the carrying capacity of the forested range. Past studies show seedling-sapling stands (brush and trees under 5 inches in diameter) can comfortably overwinter about 40 deer per square mile; pole timber (trees 5 through 11 inches in diameter) supports only 10 deer per square mile, while sawtimber (trees over 11 inches in diameter) and non-commercial timber can support 20 deer per square mile.

About every ten years, the U.S. Forest Service inventories and classifies timber stands in each county, enabling the Game Commission to readily calculate the carrying capacity of each deer management unit (county). "Antlerless license allocations are designed to bring



deer herds into line with the carrying capacity of the range in each county," Sheffer says.

Factors which affect deer population estimates include reported vs. actual harvest, sex and age composition, and survival and productivity rates. All of these factors are taken into account to determine populations and subsequent antlerless allocations. The Commission also took into consideration the impact

of recent tornadoes in those counties affected.

Sheffer points out the past two winters have been quite mild, and there have been no extraordinary deer losses due to bad weather conditions. This results in larger populations of breeding females and increased numbers of fawns.

Following are the 1985 antlerless license allocations by county:

**ANTLERLESS DEER LICENSE  
ALLOCATION FOR 1985**

<i>County</i>	<i>Licenses</i>	<i>County</i>	<i>Licenses</i>
Adams	7,700	Lackawanna	2,900
Allegheny	9,750	Lancaster	8,150
Armstrong	10,650	Lawrence	2,000
Beaver	6,200	Lebanon	5,100
Bedford	11,550	Lehigh	4,450
Berks	16,000	Luzerne	8,350
Blair	9,350	Lycoming	14,600
Bradford	11,850	McKean	12,100
Bucks	9,700	Mercer	6,850
Butler	13,650	Mifflin	4,900
Cambria	5,150	Monroe	4,550
Cameron	2,900	Montgomery	4,100
Carbon	5,950	Montour	1,350
Centre	14,100	Northampton	4,900
Chester	11,050	Northumberland	6,900
Clarion	7,300	Perry	7,000
Clearfield	12,050	Philadelphia	—
Clinton	7,900	Pike	7,750
Columbia	6,950	Potter	14,900
Crawford	10,900	Schuylkill	7,150
Cumberland	6,000	Snyder	5,500
Dauphin	7,950	Somerset	10,950
Delaware	1,650	Sullivan	6,000
Elk	10,850	Susquehanna	7,250
Erie	8,650	Tioga	13,900
Fayette	6,000	Union	2,650
Forest	6,900	Venango	9,050
Franklin	3,350	Warren	14,100
Fulton	5,800	Washington	15,600
Greene	14,600	Wayne	8,250
Huntingdon	13,200	Westmoreland	14,750
Indiana	11,450	Wyoming	5,100
Jefferson	8,900	York	9,350
Juniata	5,950	TOTAL	552,350

# 25 Officer Trainees Picked

**T**HE Pennsylvania Game Commission in May announced the names of the 24 men and one woman who have been selected for the 19th class of game conservation officer trainees. The 25 were chosen from approximately 5000 applicants after a series of written, oral and physical examinations.

Twelve of the trainees have been involved with wildlife conservation and law enforcement as deputy game protectors, and two other members of the class have been serving as deputy waterways patrolmen. Four are veterans of the armed forces, and fifteen are married. Average age of the group is 30, with the youngest being 24 and the oldest 36. The woman is the second to be chosen to undergo game conservation officer training in Pennsylvania.

## 37 Weeks Of Training

Members of the groups will have approximately thirty-seven weeks of intensive training, most of it at the Ross Leffler School of Conservation near Brockway in Jefferson County. Trainees reported to the school on June 2.

Included in the school's curriculum are subjects such as wildlife management, public relations, laws governing game and fish, legal procedures, mammal and bird identification, criminal law, firearms training, unarmed self-

defense, habitat management practices, etc.

In addition to the academic training, members of the class are assigned to work with field personnel during periods of peak activity. Following graduation next February, the trainees will be assigned to positions as either game protectors or land managers throughout the state.

Members of the new class— all Pennsylvanians— and their hometowns are:

Peter F. Aiken, West Grove; Rodney S. Ansell, Connellsville; Richard S. Bodenhorn, Brookville; James L. Brown, Gillett; Donald G. Chaybin, Belle Vernon; Robert W. Criswell, Bedford; John Denchak, Gordon; Michael A. Dubaich, Aliquippa; James W. Egley, Avonmore; Timothy M. Grenoble, Mifflinburg; Clifford E. Guindon Jr., Beaver Falls; Arthur S. Hamley, Verona;

Shayne A. Hoachlander, Mechanicsburg; John A. McKellop III, Wattsburg; Dennis L. Neideigh, Elizabethtown; Stanley W. Norris, Fairhope; Robert L. Prall, Dunmore; Colleen M. Shannon, Duncansville; Richard J. Shire, Philadelphia; John C. Shutkufski, Lake Ariel; Steven M. Spangler, York; Roland J. Trombetta, Barto; Richard F. Weaver, Anita; George A. Wilcox, Mansfield; and Barry S. Zaffuto, Duncansville.

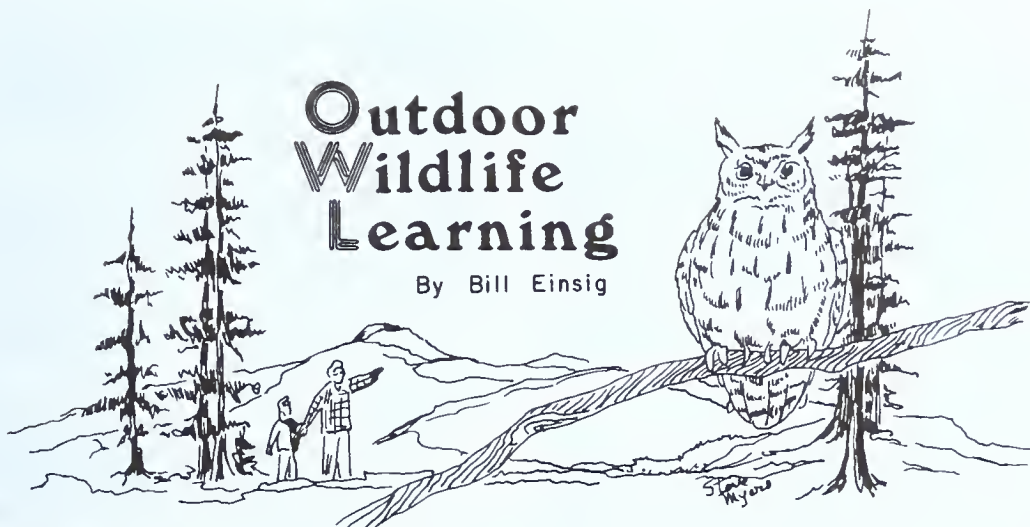


**TWENTY-FIVE** trainees recently began training at the Ross Leffler School of Conservation. After 37 weeks of training they will be assigned as either game protectors or land managers.



# Outdoor Wildlife Learning

By Bill Einsig



**T**HE OLYMPICS are coming to Pennsylvania! No, it's not the same athletic event we enjoyed last summer from Los Angeles, and it's not the exciting thrills and spills of the winter games. These olympics are barely two years old, and they pose a new challenge to high school students and their teachers across the state.

The Envir-olympics is an interscholastic competition sponsored by the Pennsylvania Association of Conservation Districts. Teams of five students each represent their schools in competitions to determine a county champion. The county champion team then moves onto the state competition held at Shaver's Creek Environmental Center near State College.

The competition tests the students' knowledge of Pennsylvania natural resources and of their management techniques. Just as the Olympics consists of a series of athletic events, the Envir-olympics consists of five stations at which students vie to correctly answer questions about various resources.

For instance, the Pennsylvania Game Commission operates a station dealing with wildlife and its management. Each team is expected to identify ten bird and mammal species selected from the Commission's bird and mammal charts. Team members also identify a series of tracks, bird calls, wildlife foods and various wildlife sign. Usually, actual specimens have to be examined and identified.

Team members are also taken to a nearby study site—perhaps a field, a woodlot or a wet area—and asked to name the species of wildlife they could expect to find living there. Obviously, this event is more than a paper and pencil test.

Another station is operated by the Soil

Conservation Service. It tests the students' understanding of soils and their uses. Team members have to describe properties of soils at various depths in a pit. Just by examining a soil they are expected to tell if it was formed from shale, limestone or sandstone rock, and whether it is a residuum, alluvium or colluvium.

Perhaps the toughest part of this station, however, requires the student to apply what he or she knows about a soil type, and to describe the problems of using that soil for various purposes. Would this be a good soil for a sanitary landfill? For a septic tank? For the spreading of sewage sludge?

The Bureau of Forestry operates the third station and, again, students have to apply what they've learned in order to score well. Teams are taken to a small woodlot and asked questions about the trees in that area. How many board feet of lumber in this tree? What is the wood of that tree used for? Is this crown class dominant, intermediate or suppressed?

The Pennsylvania Fish Commission sponsors a station on water resources, and a fifth station is hosted by a different conservation organization each year. This summer, the Pennsylvania Alliance for Environmental Education hosted the fifth station, which focuses on selected environmental issues. The issue chosen this year was that of solid wastes.

Team members compete individually, and individual scores on each event are totaled for a team score. The team with the highest cumulative score for all events receives a plaque. Team awards are given for first, second and third places, and all students receive certificates which recognize their participation.

In 1984, six counties joined the state



competition at Shaver's Creek. This year there were nearly three times that number. Organizers hope that most of the 66 counties with conservation districts (Philadelphia County doesn't have one) will organize a local competition and send their champion to the state finals.

It's also possible for other conservation organizations to help the local program even though the event has to be sponsored by the county conservation district. A large and active sportsmen's club which has a real desire to work with young people could cooperate with the local conservation district. Working together, and perhaps with other area organizations, they could sponsor a successful competition that would focus public attention on the need for conservation and, at the same time, provide a wholesome learning experience for young people.

The organizers of the state competition are eager to help more counties get involved with events of their own. A handbook gives information on how to organize a local contest and comes complete with sample rosters, scoring sheets, schedules and registration forms.

Your local conservation district should be able to give you more information on the Envir-olympics and describe their plans to

get involved. For a copy of the handbook and for answers to questions not answered here, contact Warren D. Werntz, Bureau of Soil and Water Conservation, DER, P.O. Box 2357, Harrisburg, PA 17120.

## Envir-olympics Quiz

Test yourself with this small sampling of questions taken from a recent Envir-olympics competition.

1. What is America's number one water pollutant by volume?
2. Do catfish have scales?
3. What tree has a muscle-like trunk?
4. What is the most detrimental effect of the gypsy moth on wildlife?
5. What is the only animal in Pennsylvania classified as a furbearer with no open season?
6. What three factors determine the size of antlers on a deer?
7. What protected bird builds a bulky nest of twigs and branches high in deciduous trees and has a diet of mice, rats, snakes, fish and insects?
8. All of the water on earth has been here since the beginning of time and has been filtered through at least three sets of kidneys. True or False?
9. In Pennsylvania, groundwater is rarely found to be contaminated. True or False?
10. How often should a septic tank be pumped out?

## Answers

1. Sediment
2. No
3. Ironwood
4. Loss of mast crop
5. Otter
6. Food, age, heredity
7. Red-tailed hawk
8. True
9. False
10. Every 1-5 years

---

## One-Fourth True

There's no validity in the old saying that moss grows only on the north side of a tree. In a dark moist forest, moss can be seen growing all around the trunk of a tree.

## Lives Up To Name

The "pack rat," the white-throated wood rat, has been known to cart off an array of objects to adorn his desert home—including eyeglasses, false teeth, even mousetraps.



# Parenting in the Wild

**C**ERTAINLY, there can be no occupation as demanding, and as important, as parenting . . . or, before that became a popular verb, “raising kids.” In the giving of well-reared offspring to the future, some parents rely on the latest books on child development, while others just follow grandma’s advice. There’s no one “right” way to bring up baby, not only in the human world, but also in the world of wildlife. And nature has tried almost every scheme.

Anyone who’s spent time outdoors in all seasons has seen wild animal young, from coddled babes to orphans. Wildlife “kids” grow up in many different ways, yet they all seem to turn out all right. Some are independent from birth and will never know their parents. Many are raised by just one parent, who will actually drive the other away, yet they arrive at adulthood fit and well-adjusted. Still other wildlife offspring are almost smothered under the care of both mother and dad, but all this doting doesn’t mean they’re any better off. It’s just that the many forms of family life all lead to success in the wild.

Take birds, for instance. Some seem to leave the egg half-formed, while others are ready to get up and go as soon as they get both feet out. The wild turkey and grouse are like that. The hens don’t make much of a nest, and why should they? Chicks are born feathered and ready to travel, and the hen is their portable home. She provides



**NATURE employs a wide variety of parenting strategies. The young of some wildlife require constant care, while others never know their parents.**

warmth and hovering protection with her body and, if the threat is more real, the chicks can always crouch and hide while she beats up the intruder, even if it’s a human one.

Few things are homelier and more helpless than a newborn robin. With a long way to grow before leaving home, baby robins, like the young of many birds, demand constant parental care. Even the choice of nest site, high or hidden or protected by thorns, seems to advertise the chicks’ vulnerability. And once the ungainly infants hatch, there’s no rest for the flying mom and pop. The parent birds are virtual slaves to their young. There’s certainly no life of their own while there are babes at home . . . and hungry.

Any time I have watched parent wrens make the constant relay from my garden to the nest, I couldn’t help but be amazed at the ceaseless stream of insects that go down the young birds’ gullets. I’d keep expecting them to bulge out the nest box. Wrens have been recorded as making over 1,200 trips to nestlings between sunrise and sunset and there is one famous record of a baby robin consuming fourteen feet of earthworms in a day. The more incred-

## Another View...

by Linda Steiner

ible part is that a mother and father bird caught those worms and delivered them. For some birds such as hawks the round of feedings happens just once a summer; for others, including robins, wrens, mourning doves and mockingbirds, two or three broods may be raised in a season.

On the other extreme is the utmost in avian laziness, the cowbird. The cowbird lays its large egg in another, often smaller, bird's nest. The unwitting foster parents raise the cowbird's out-sized young with, or even instead of, their own.

### **Cold-Blooded/Cold-Hearted**

At first sight, the cold-blooded creatures seem correspondingly cold-hearted as parents. Frogs, snakes, turtles and salamanders, with few exceptions, lay eggs and leave them to the vagaries of the future. But the turtles that are seen sauntering along dusty summer roads, looking for a nesting spot, and the salamanders that gather at the appointed time in spring pools, are showing their parental solicitude in the where and when they deposit their eggs. And, remember, except for size, a baby rattlesnake or snapping turtle is ready-made with all the accoutrements and capabilities of its mother. The scheme works so well that 99 percent of the world's known animals simply lay eggs or deliver their young and move on alone.

Animals like the deer and bear lead truer family lives. Being mammals, they must spend at least some time with mother. And a large number are brought up by just that single parent. Dad's not needed, or wanted. Bear mothers and cubs are known for their close relationship, as are raccoons. The mothers of both species will protect and defend their offspring from any male, including the father, who might have an eye on an easy meal. As for being attached to mom, it's hard to beat the opossum. No sooner does she get the young ones out of the pouch than they are on her back, literally, hitching a ride until they're so big they

can't all fit in the available space.

As much as outdoorsmen admire deer, we have to admit they're rather passive about parenthood. The buck is indifferent and lives apart, and even the doe doesn't spend much time with her babies. But this is probably the best policy for a prey animal, which the deer is. Like the cottontail, which will sit a little apart from its fur-lined nest of newborns, the whitetail will keep away, except at feeding time. But though out of eyesight, the doe is rarely out of ear or nose contact.

For the two-parent family life, the foxes are exemplary. The pups are fed by, learn from, and play with both. Anytime I've observed young red foxes around their den, they seemed to lead an idyllic sort of life. They wrestle, play tug-of-war with sticks, and jump at butterflies.

Several times I've gotten close to them with a camera. Once, by taking one step too many, I sent a pair of fox pups hurrying down into the den. I took the opportunity to get closer and focused the camera on the hole, waiting for them to reappear. They didn't and, tired of waiting, I put my lips to my hand and squeaked, hoping curiosity would make a little head appear. Instead, a larger orange form raced down the hillside toward me. One of the parents, probably hunting nearby, had been alerted by all the squealing that something was wrong at home. The big red spotted me and stopped short, then jumped on top of a boulder to sit and stare. It was a standoff and I vacated rather than disturb the den site any more. The last thing I saw was the parent fox nosing into the den hole to check up on the kids.

I was touched by the obvious parental concern of the fox, but the fact that there aren't more foxes than turtles and that we're not swamped with swallows would seem to say that the two-parent system isn't the only way to success in the wild. Judging from summer's abundance of young life in field and forest, every scheme of child raising is a good one.



# young artists page

**Bobcat**  
**Brenton Woolley**  
**Somerset, PA**  
**Somerset Junior High School**  
**7th Grade**



**Cottontail**  
**George Kabo**  
**Conemaugh, PA**  
**Conemaugh Valley High School**  
**12th Grade**



**A**UGUST brings with it the realization that the beginning of our busiest season is just around the corner. This month finds many of us trying to budget a little extra time for family life and the household chores that will soon have to be put on the back burner until after hunting season.

*August 1 & 3*—The beginning of the month finds me catching up on paperwork and catching skunks in Emporium. To say that the town is over run with these pests is an understatement. We catch as many as two or three at a time in the same box trap.

*August 6*—County Extension Agent Rod Kenniston has asked me to be his guest at a 4-H Rifle Team meeting at the Sylvania Rifle Club. I show a film on the duties of game protectors. As I look around the room at the young faces, I wish I had become involved in competitive shooting at their age. These young men have two fine examples to follow in both Rod and Mike Acierno, their sponsors.

*August 13*—I've been invited back to the next 4-H Rifle Team meeting, this time showing a video tape entitled "Gunfight U.S.A.," borrowed from the National Rifle Association. The tape, which was originally aired on *Frontline*, explores the pros and cons of gun control. It's an issue that as responsible gun handlers these youngsters need exposure to.

*August 14*—I assist instructor Don Sherry at the Sinnemahoning Sportsmen's Club with the first hunter education course of the fall. I have the floor for about an hour. It's good to get my feet wet again as my duties in this field are largely confined to administrative functions.

*August 15*—Virgil Chambers, water safety specialist for the Fish Commission, presents a course for Northcentral Region conservation officers and Food & Cover Corps employees at the George B. Stevenson Dam. Due to the wooded terrain and attendant lack of waterfowl in Cameron County, my normal duties don't often take me near water. However, as I do spend a great deal of time assisting Waterways Conservation Officer Hastings with stocking and Fish Law enforcement in the spring when streams are swollen, I find the course invaluable. McKean County DGP John

Dzemyan and I demonstrate how not to operate a canoe by tipping it over (this comes naturally for us). Virgil shows the class the proper method of rescue.

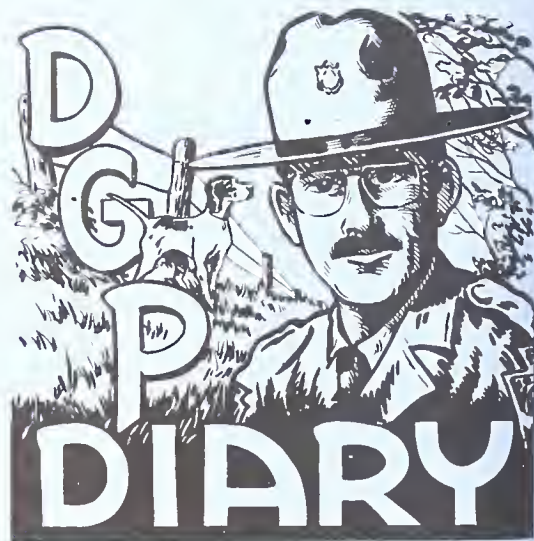
In past issues of DGP Diary I have alluded to the lasting friendships and comradeship that exist among those of us in the natural resources management field. This is the case with Virg and me, as we were both deputy game protectors in Clarion County in the early 1970s while pursuing our educations at Clarion State College. He went on to his position with the Fish Commission and I stuck with the Game Commission. Neither of us has ever regretted staying in the conservation field.

*August 16*—The day is spent setting up a display for the Cameron County Fair. In the evening I assist instructors Don Benedict, John Micklich, Fred Roberto, and Bill Johnson with a hunter education class at the Bucktail Rod & Gun Club.

*August 20*—I man the display at the fair this evening.

*August 21*—I give instructions in the techniques of police shotgun use at a practice shoot for salaried officers of the Northcentral Region at Scotia Range.

As I will be running late this evening, Deputies Jean Smith and Bill Olivett will handle the fair display for me. As the topic of this year's display concerns the duties



**By Joe Carlos**

District Game Protector  
Cameron County



of game conservation officers, I can't think of any finer and more professional representatives than these. By directing some of the limelight toward these officers, I am trying to accomplish one of my long standing goals: to convince the public that the Game Commission is more than just the district game protector. The Commission has over 700 fulltime employees, but only 100+ are conservation officers. In addition, we have a complement of 1200+ deputies. Virtually every one of these is as dedicated and competent in his fields as the game protector. It is the meshing of all our talents and skills that has made the Game Commission the great organization it has been for nearly a century.

*August 22*—I meet Elk County Deputy Rawley Cogan in the afternoon. Rawley had problems with his service revolver, and several weeks ago I shipped it to custom pistolsmith Austin Behlert for repairs. I picked the gun up this past weekend on my way to a match at the Philadelphia Police Academy and Rawley and I plan to try it out today. After a good workout we are satisfied that it is better than new.

This evening I work the fair display again.

*August 23*—I assist DGP Harold Harshbarger with a bear complaint near St. Marys in the morning and work the fair this evening.

*August 24*—I work on my DGP Diary in the morning and man the fair display in the evening.

*August 25*—The morning is spent in the office catching up on paperwork.

Deputies John Schatz and Bill Smith are trying their hands at the fair display this evening. As this is the final night, I arrive around 10 p.m. and we dismantle the exhibit and load it up in preparation for its return to the regional office.

*August 26*—Most of the day is spent typing my DGP Diary. I spend about one full day a month preparing this column from rough draft to finished product.

*August 27*—I return the fair display to the regional office today and pick up a desperately needed second bear trap. Deputy Danny Brehm has expressed keen interest in bear trapping and research, and in a

year or so, after appropriate training, I hope to assign this trap to him for use in the Emporium area.

*August 28*—I have intentions of taking the evening off, but like the best laid plans of many mice and men, the ringing of the telephone puts that idea to rest. It's Charlie Baker calling from a pay phone and he sounds excited. He and Elk Research Assistant Rawley Cogan have snared a yearling cub bear in the vicinity of Mason Hill. Upon drugging the animal and checking the tag numbers, they discover it is one of a litter of three which Bear Research Assistant Craig McLaughlin, my wife Anna, and I had originally tagged the previous spring in a den near Sterling Run. At that time we located the litter through use of telemetry equipment as the sow was radio collared. The transmitter batteries later went dead and we have been hoping to replace the unit. Tonight may be our opportunity.

The plan is this: I am to bring the bear trap to the scene. The cub will be placed inside. When it recovers it will cry out to the sow, which we hope will investigate and succumb to a snare or the dart gun. The technique has worked in the past. I hurriedly hook up the trap and start up the steep mountain road toward the location.

About halfway up, something just doesn't sound or feel right. It is dark now and I can't see behind me so I stop and get out. To my dismay, the bear trap is missing, and I have a clear picture in my mind's eye of a \$2,000 piece of valuable equipment rolled over a steep bank somewhere. Backing down the hill I am relieved to find the trap right in the middle of the road where it came unhitched. Both safety chains have broken, but the rest of the trap is intact, and after some delay I have it in tow again. Just one of those nights!

When I arrive on the scene a half-hour late and ask the two researchers where the cub is, they indicate it is asleep on the far side of Rawley's Jeep. I step around with my flashlight to get a look at what has caused so much trouble. You guessed it—the cub is gone. In making calculations on how much drug to use, Rawley had no way of predicting my delay.

We locate the cub staggering off a short distance away and make a mad scramble for our equipment. The next 20 minutes resemble a tag team wrestling match. The cub emerges victorious. Only one thing



### Question

Can I be held liable for damage to real or personal property, including crops, while hunting?

### Answer

Yes. If you are convicted of damaging property, the court may appoint a competent appraiser to assess the damages. You would be obligated to pay those damages to the court for disbursement to the property owner.

goes as planned—the cub's cries bring an angry sow on the run. We know when we are outmatched and make a less than dignified withdrawal, soaking with perspiration, cut and dirty.

The night hasn't been a total loss, as Charlie and Rawley were able to weigh and

measure the cub while waiting for me. The data will be important in studying growth rates among cub bears here in northcentral Pennsylvania.

Charlie does raise a rather interesting question about our misfortune of the evening: "How can you win when you're dealing with a ghost?" When I ask him to explain he refers to a recent article in a local publication which erroneously reported that all three of the cubs which Craig, Anna and I tagged in Sterling Run had died as a result of being handled.

Cub bears and bear research in general are emotional subjects to many persons, and much misinformation about them appears. To the best of my knowledge, no bears have ever been lost in Cameron County due to the research project, and certainly none since I have been here. In fact, Gary Alt tells me that the percentage of bears lost due to drug reactions, etc., is less than the percentage of humans lost on the operating table while undergoing appendectomies—considered simple operations today. To combat some of the apprehension that rumor and this type of journalism have caused among sportsmen, I try to take an interested person with me whenever I am handling a bear. That way they can see first-hand that the animals are not abused. But I have to confess that I'm not sorry we didn't have an audience this evening!

**OUTSTANDING** employee awards were presented recently to District Game Protector David Koppenhaver, Audio Visual Services Chief Joseph Osman, Special Operations Chief Barry Warner, Information and Education Supervisor Edward Sherlinski, and southwest region secretary Irma Stouffer. In recognition of their exemplary services, each received a plaque and a 1985 Working Together for Wildlife fine art print.





I TOLD THE mason I planned to face my house with stone; said I figured on doing the job in three years. He laughed. "No," I said, "I really think I can. This summer I'll lay up the north wall. Next summer, the west wall. And the summer after that, the east wall." (The south wall is given over to glass and wood.)

"That'd be 1985," he said. "You'll never make it."

We bet, and I lost. It's 1985 and I am just finishing the north wall, with a little of the east and west walls laid up, so that leaves me not quite halfway done. If I haven't laid a lot of stone, I have nevertheless learned a good deal about stone masonry. I have managed not to wrench my back, or smash a hand, and other than a few scrapes and dents, I have not given up too much flesh.

I have always loved stone houses. They seem to grow right out of the ground. They blend with the landscape, as natural as outcrops or trees. They are solid, and they last; whenever I look at a stone house I start thinking about history. The stone itself is beautiful. As daylight changes and the sun marches across the sky, stone walls change, too, the pattern of shadows on their rough skin heightening or lessening, the colors coming up and glowing. I like wood houses—their feel and their smell—but there is something special about stone: it is alive, and it is going to live—if not forever, then for a very long time.

### Free For Taking

Part of the reason I decided to build with stone is that the stone was free for the taking. At the time, I lived near two barns that had recently burned. The owners said I could cart away the foundations. I bought a big sledge and a green-headed mason's hammer and a pry bar, and started working. I would pry a stone out of the top of the wall; it would fall, trailing a little avalanche of clay-lime mortar. The stones were usually about a foot from the front, or face, to the back. I had decided to make the facing on my house seven



*Chuck Fergus*

inches thick, so I reduced each stone to seven inches. Using hammer or sledge, depending on the massiveness of the stone, I would slug away at the back. The blows sent shock waves tingling up my arms; when dusk fell, sparks flew from the hammer heads.

I would spend hours in the old foundations, getting tired and sweaty and covered with sand and dust. I found relics as I pulled down the walls: green-glass bottles entombed in the mortar, mummified mice, cut nails, and the whorled print, in a patch of mortar, of the first mason's palm.

As well as working on the barns, I would scavenge stones from fencerows where farmers had heaved them to protect their plows; from tumbledown foundations deep in the woods, overgrown with shrubs and vines; from streams and mountainsides; and I even talked an Amishman out of three good cornerstones lying in a field near his house. Every now and then I would haul a truckload over to my land.

The stone is mostly sandstone, and some limestone mixed in. The limestone is chalky gray, and it comes from the valley floor. The sandstones are brown, tan, reddish-brown, pink, gray, a pale sea green, or a gradation between two of these colors. Some carry bands or blotches of color. Some have lichens like blue-green snowflakes. A few bear dabs of paint or tar, or chiseled initials. One has a date: 1834.

The local sandstone comes from the ridge above the valley. Unlike many other types of sandstone, it is not crumbly. It is hard — most of the rocks ring like iron under the hammer. The stone is composed of many thousands of sand grains cemented together by a glue-like mineral called silica. Geologists have named this rock Tuscarora sandstone; Tuscarora is an Indian name and the name of a nearby mountain topped with this hard, resistant stone. The geologists believe the sandstone was laid down in a shallow sea many millions of years ago. In my stones, I can see crossbedding: thin, intersecting layers of sand grains that lie not quite parallel to one another, just like the sand visible on the sides of dunes that the ocean has cut into. Seen under a microscope, many of the sand grains are rounded; the scientists say that this roundness means they spent time being blown about in the abrasive environment of a desert. Someday, the grains in my stones will weather loose. They will travel, by wind or water, down to the ocean. There they will sink again under accumulating layers of sand, settling deeper and deeper into the earth, until they are compressed and heated and become sandstone once again. Then, say the geologists, the earth will raise the sandstone to mountain height. This recycling seems incredible, but vaguely probable. What does not seem probable is that in some later age farmers will be around to pry the stones loose, shape their faces with hammers, and lay them into walls.

### Leisurely Pastime

Laying stone is a pleasant leisurely pastime. Progress depends upon my finding the right shape for a certain spot, or on chipping away an edge or a protrusion to fit the stone to the spot.

Suppose I have a gap that is twelve inches across, and a stone with a fourteen-inch face. I nibble away on one edge with a stone hammer or a chisel, until the stone is just the right size. Or, I score the stone deeply with the chisel all the way around where I want it to

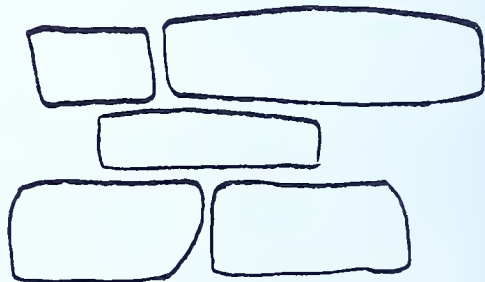
break, then rap it smartly in the groove; often it breaks in the right place. I have three chisels, varying in width from one-half to three inches, a mash hammer to hit them with, the four-pound stone hammer, and the eight-pound sledge; the latter two tools have a sharp vertical cutting edge, and, at the other end of the head, a flat face for rough shaping.

The basic rule for laying stone is “one over two, two over one.” When two stones are laid side by side, a joint



exists between them. This joint must be spanned in the next row, called a course, by laying a stone on top of the joint so that the new stone overlaps the two below. This is the “one over two” part of the rule.

“Two over one” means that in the next course I must lay two stones so that



their joint comes above a stone in the course below.

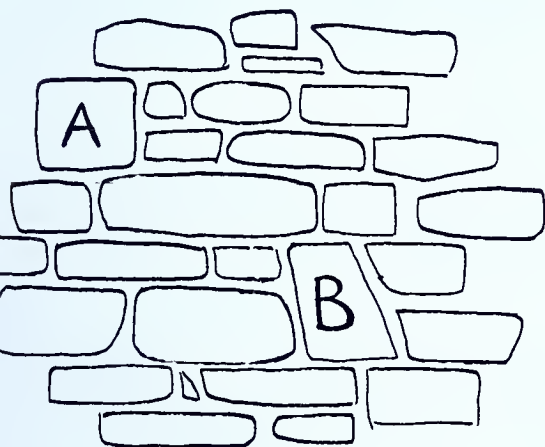
Following the rule, I end up with no running vertical joints — potential lines



of weakness that could send the wall toppling.

Of course, stones are not uniform like bricks. Nature delivers fat stones, skinny stones, stones that are round, square, and wedge-shaped, small stones and large—all of which must be integrated into the wall.

Long horizontal joints between courses don't look good. I break up these eye-catching lines with a thick stone (A) or a stone set vertically (B). I try to get a good mix of colors, although this seems to take care of itself. Often I stand back from the wall, close one eye and unfocus the other, and try to get an over-view. I decide, then, that



I need a vertical to break up the next course. Or that I'm starting to lay too many stones of the same size too close together, in which case I start looking for a lunker or some small ones. I filter in odd shapes. I don't want any one part of the wall drawing too much attention to itself; I like it when the whole expanse seems to shimmer.

Where two walls come together—a north wall and a west wall, for instance—cornerstones make the link. Cornerstones are square or rectangular, laced together like a praying man's fingers. To make one, I rough-shape a stone with hammer and chisel, working always with the knowledge that one wrong blow, one hidden flaw in the stone, will leave me with nothing more than two building stones. For looks, I

smooth the exposed faces and sharpen the outermost corner, which must line up under a plumb bob hanging from the eaves when the stone is laid. For smoothing, I use a point, a stout, cylindrical chisel with a pencil-sharp end. The point inclines against the stone's face; it rings under the mash hammer; and a tiny chip spalls off. Fortunately, I was able to scrounge most of my corners from the old foundations.

My mortar is not the clay-lime mix that masons used in 1854; I use sand and masonry cement and water, a mixture still referred to as "mud." I mix my mud in a steel trough and trundle it to the wall in a wheelbarrow. I trowel it onto the top of the wall and set the stones in the mortar bed, tapping them with the trowel handle to drive out any air pockets beneath.

I finish, or point (not to be confused with chisel of the same name) my joints as I go. Pointing, which is the exposed mortar between stones, can be done in many colors, many styles. Masons sometimes add red, brown, or black coloring to the pointing mix; they slap it on thickly so the stones barely peek out; they rake it back deeply; they mold it out in a rounded or square-edged bead. I chose a white mortar which, mixed with yellow sand, yields a creamy color. And I adopted a simple, often-used style: joints raked back deep enough to let the stones show boldly, but not so deep that water can get in and stand.

### Patience and Time

Beyond these simple techniques (and along with a host of more minor ones for making stones behave and mortar set properly and for getting stones, mud, and self up to points above shoulder height), there isn't a lot to stone-casing a house. It takes patience. And, as I have learned, time.

I like to write in the mornings and then go out and spend my afternoons laying stone. I've noticed that the two activities are strikingly alike: blending mud and stones into a wall, blending words, sentences, paragraphs into an essay.

In many ways, working stone is more fun. I get to root around in my stone pile looking for likely shapes. I greet the garter snake that slithers away, the frogs that peer around corners looking out for the snake. I swat flies on my shoulders with my trowel, spattering my back with mud. I get filthy, I gulp pitchers of water, I sit in the dirt and gauge the

progress of my days. Hours flow like water. Phoebes dip to take flies that light on the sun-warmed stones. Ravens rattle from the woods and deer rustle past in the laurel; soon I can see the sparks flying from my hammer, hear the hooting of owls.

At times like these, I'm glad I lost my bet.

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Shotgun Shooting: Techniques and Technology**, by John Brindle, Triplegate, Ltd., 51 Washington St., Dover, NH 03820, 256 pp., \$22.50. A comprehensive book on shotguns and shotgun shooting. After covering shotgun basics, the author goes into shotgun stocks and shooting styles, shot patterns and penetration, choosing guns, loads and chokes to match particular shooting sports, and cleaning and maintenance. Many illustrations.

**Guide to Owl Watching in North America**, by Donald Heintzelman, Winchester Press, 220 Old New Brunswick Rd., Piscataway, NJ 08854, 144 pp., softbound, \$8.95. Follow this guide and discover a new facet of birding. Complete species accounts for the 19 species of North American owls are followed by chapters on owl watching, equipment, pellets and food habits, migrations, adaptations and conservation practices. Concluding are state-by-state listings of notable owl watching areas.

**Bowhunting for Whitetails**, by Dave Bowring, Stackpole Books, Dept. LG, P.O. Box 1831, Harrisburg, PA 17105, 291 pp., \$24.95 (plus 6% sales tax to PA residents) and \$3 postage and handling. Bowhunting is undoubtedly the most challenging type of hunting there is because of the many skills required. Finding a place to hunt, scouting, picking a stand, developing shooting skills, and tracking are all covered here. Bowhunting's not for everybody, but if it's for you—or you think it is—so's this book. Over 150 photographs and illustrations.

**Short Term Survival Techniques**, by John Tomikel, Allegheny Press, Elgin, PA 16413, 144 pp., softbound, \$5.60. Sound advice on surviving all types of disasters, from nuclear explosions and airplane crashes to just a few hours of "disorientation" in the deer woods. Although most of us—we hope—will never have to face the situations covered, familiarity with the fundamentals presented here will give the reader the confidence so important in surviving mishaps should they arise. The author, a former survival advisor to the military, covers surviving in hot, cold, wet and dry environments, first aid and basic survival tips.

**Field Guide to the Commonwealth of Pennsylvania's Public Hunting Grounds: Eastern Pennsylvania Edition**, by Thomas Kosek, from the author at P.O. Box 166, Eagleville, PA 19408, 220 pp., softbound, \$9.95, delivered. The author, who hails from southeastern Pennsylvania where areas open to public hunting are not nearly so common as in the rest of the state, assembled this guide to places in eastern Pennsylvania where hunters can go, knowing they're welcome. Arranged by county, extensive descriptions of every Game Lands, State Forest and State Park east of the Tioga-Potter county line and the Susquehanna River are provided—173 in all. Each includes the size and topography of the area, small and big game species that can be found on it, access directions, parking areas and more. A similar guide for western Pennsylvania is being planned by the author.



Darwin L. Kyle . . .

# And His Three Sons

By Keith C. Schuyler

Photos from the Author

**I**F THERE is a family anywhere that is more oriented to target archery than that of Darwin L. Kyle, of Altoona, it hasn't come to my attention. Should there be a challenge, it would first be necessary to compare scores with his three sons, Mike, Buddy and Tommy, to decide the winner. And the many accomplishments of their Olympic coach father, who has extended his talents internationally, would needs be considered.

There is a Scottish word *kyle*, which pertains to a channel, strait or sound. It might well describe the direction taken by the masculine members of this family, for all are involved in Altoona Archery Supply, Pro Shop and Indoor Archery Lanes, a family business. And all have been top competitive archers.

These days Darwin takes primarily a vicarious interest in shooting the bow. His pride is in the accomplishments of his sons. Darwin has served his time on the shooting line and now devotes extra hours to teaching and extending his personal abilities through coaching here and abroad. His personal record has been limited to date only by the calendar, since his involvement in state, national, and international affairs of archery holds considerable promise for the future.

Darwin currently enjoys the top title of Level 5 Master Coach in National Archery Association, and he is a certified U.S. Official. He serves as secretary treasurer of FITA Archers of Pennsylvania, largest NAA-affiliated club in the United States, is director of archery and board member of Keystone State Games, and is director of JOAD, Altoona Junior Olympic Archery Development. Darwin serves on the



**DARWIN KYLE** can certainly be proud of his three sons, Tommy, Buddy and Mike. Each has already distinguished himself as an award winning archer.

Paul Singer, Altoona Mirror

staff of the pro shop at The World Archery Center, and he has been director of shooting at Pennsylvania Indoor, State Target, and Keystone State Games for the past three years.

His most interesting assignment to date was coaching of an Olympic team from Bhutan, a tiny monarchy squeezed between China and India in the Himalayas, where archery has long been a national pastime. It required a 15,000-mile round trip and six weeks as a guest



**BUDDY KYLE** has won several state and national honors, including an Outstanding Pennsylvania Athlete of the Year Award for 1984.

of the royal family, two of whom made up the six-member team (three men and three women) who competed in the summer Olympiad at Los Angeles. He will again coach the Bhutan team for the 1985 World Archery Championships in Seoul, South Korea, October 15-16.

Hunting comes high among archery activities for Kyle, who bought his first bow in 1952 with money earned setting pins at a local bowling alley. He has hunted since 1954, except for a stretch in the Navy, 1956-1960, and has taken seventeen white-tailed bucks and three wild turkeys. In the interim, he won the Pennsylvania State Indoor title in the FITA Division; placed second or third in State Championship outdoor tournaments, 1977-1980; and was top bow in Pennsylvania Field Tournament, 1982-1983.

### Alternate Coach

In March of this year Darwin was elected by the board of governors of National Archery Association to serve as alternate coach for the World Target Championship at Seoul in October and as Team Leader for the Eastern Sports Festival Team, which was scheduled for Baton Rouge, Louisiana, last month.

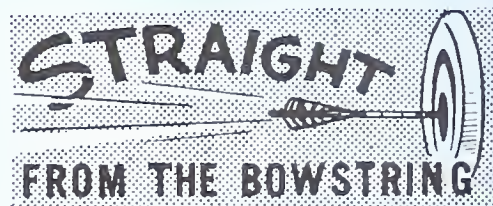
Darwin is now content to "just coach and officiate. The kids are getting too hard to beat."

His "kids" have been building their individual archery careers from a firm

foundation of accomplishments that have had local, state, and national attention. Oldest of the three, Michael, has had a remarkable record at the target line in addition to sharing responsibility for the family business at times with his mother while his father was in Bhutan. In reviewing individual records, it is necessary to allude only to the past in the rapidly changing scores over the nation as new records are established, but the Kyle kids have already made their marks and are likely to continue.

For example, Mike has held the top scores ever recorded in Junior FITA I, with a 566, and Junior FITA II, at 567. When he became an Intermediate last year, he won his class with a 573 score in FITA I, a new world record and the highest of any score at the Reading Eastern Tournament. Each of these scores was a new U.S. record. He won the U.S. Indoor National in his class in both 1983 and 1984. He held all Pennsylvania State Indoor records three years running, and for two years held all records for JOAD. In both 1983 and 1984, he won the gold medal at the Keystone Games.

Mike was born March 31, 1969, and consequently became 15 last year. He moved up to Intermediate Boys Division after establishing an enviable record in Junior Boys Division, which covers ages 12 to 15. Mike shoots a 44-pound Yamaha at 27¾-inches with X-7 2014 arrows. His current ambition is to







**MIKE**, above, doesn't show much room for improvement with a score of 297 out of 300. **Darwin**, right, has earned worldwide recognition for his shooting and coaching abilities.



enter a college where he can continue with his shooting. Meanwhile, his sights are set on breaking the FITA II intermediate record set by Rick Bednar, at 576, in 1975. And, of course, there is always the 1988 Olympiad in the near future.

Buddy, who will be 14 on August 17, has been shooting as a Junior for two years, and now has a chance to better his older brother's scores in that classification. He does hold one national record set as a Cadet with a score of 560 in the FITA II. And he did win both the indoor and outdoor National Tournament in his division in 1983. He also won the JOAD Tournament two years running, and was gold medalist for three years, 1982-1984, in the Keystone Games. Buddy still has a year to chop at Mike's Junior scores before moving into the Intermediate Class himself.

His dad says that Buddy didn't shoot up to his potential in 1984, but 13 was also a slow age for Mike. Nevertheless, honors keep coming to No. 2 son, who is a real champion in his own right. Buddy shoots a Yamaha 36-pound bow at 26½ inches, utilizing XX75 arrows.

Tommy, who moved into the Junior Class on his twelfth birthday, July 15,

has his work cut out for him just chasing some of his brothers' top scores. He may give them cause for concern before he gets much older. He was third among Cadets at the Keystone Games at Penn State in 1983, and first in the Eastern Indoor at Reading last November.

### Own Choice

Darwin Kyle admits that his personal involvement with archery and his indoor range is a decided advantage for his three sons. However, the choice to shoot the bow is their own. "I've never believed in pushing them. All the boys practice daily, starting in January when the indoor league starts. My only rule is that they must practice or they don't go to the tournaments."

A big thrill for the senior Kyle was the time in 1982 that Mike shot a 297 out of a possible 300 during a practice round with Skip Phillips and Rod Hoover at the Reading range. Another was when Darwin was at the Los Angeles Olympics and the three youngsters entered the Keystone Games of 1984, and each came home a winner—Mike

and Buddy in first place and Tommy with a third. Buddy was chosen as the outstanding Pennsylvania athlete at the games. Another thrill came in 1983, when Mike and Buddy set new national records in the U.S. Indoor Archery Championships and the U.S. Junior Olympic Championships at Muncie, Indiana, while their father was tied up with a local tournament. It was the only time in the history of the century old National Archery Association that two members of one family took national honors at the same time.

Buddy and Mike were chosen that year as two of eight youngsters to go to the Junior Olympic Archery Development nationals in Long Beach, California, to establish another first for two members from the same family. Buddy broke nine out of ten distance records

on the national level there, while turning in the highest score of any in the entire event, as a Cadet. Mike posted a respectable fourth place among Juniors. All scores mentioned here are in FITA tourneys.

This year each of the boys placed at the Eastern U.S. Indoor Tournament at Reading. Michael was second among Juniors, Buddy third. Tommy came up third in the Cadet Division. Certainly by the time this appears, they will have added to their honors.

It is true that such as John Williams, former Pennsylvanian and Olympic champion, and Darrel Pace, two times top Olympian, started their winning ways at an early age. It is not inconceivable that one or more of the Kyle kids may be on line in 1988.

Winning seems to run in the family.

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Decoy Pattern Book**, by Keith Bridenhagen, and **Realistic Decoys: Carving, Texturing, Painting & Finishing**, by Keith Bridenhagen and Patrick Spielman, Sterling Publishing Co., Inc., 2 Park Ave., New York City 10016, softbound 127 pp., \$9.95, and 224 pp., \$14.95, respectively. These companion volumes provide all the information needed to carve artistic and functional decoys. The former book provides the plans so critical in carving truly lifelike models; the latter explains how to produce top quality pieces, from carving to finishing. Over 300 photographs and illustrations leave nothing in doubt.

**Managing Northern Forests for Wildlife**, by Gordon W. Gullion, Ruffed Grouse Society, 1400 Lee Drive, Corapolis, PA 77 pp., \$3 (plus 6% sales tax for PA residents), softbound. An updated version of Gullion's **Improving Your Forested Lands for Ruffed Grouse**, which for the past ten years has served as a useful guide for wildlife professionals and private woodlot owners. This new publication explains how not just grouse, but also deer, woodcock and nongame wildlife needs, too, can be incorporated into forest management procedures.

**Hummingbirds: Their Life and Behavior**, by Esther Quesada Tyrrell, with photographs by Robert A. Tyrrell, Crown Publishers, Inc., One Park Ave., New York City, 10016, 212 pp., \$35. A complete and attractive account of one of the most unusual groups of birds. Hummingbirds are unique among birds in that they can hover, fly backwards, shift left and right, and even fly upside-down. The most up-to-date information on the 16 kinds of hummers in North America (338 species are known to exist, most in the tropics and subtropics), and 235 outstanding color photographs portraying plumage, nesting, feeding and more, make this a fine book on an attractive group of birds. The Tyrells spent several years and traveled over 30,000 miles to get these photographs and compile this information on what many consider "the jewels of the bird world." Their efforts and expertise show.



# THE HOLSTER GUN

By Don Lewis

Photos by Helen Lewis

**“YOU’LL NEVER** convince me any handgun will drop a buck at 300 yards,” the veteran hunter said sarcastically. “I’ve been around too long to believe that kind of hokum.”

“I’ll bet you any money I can hit a deer at 300 yards,” a handgun-toting hunter whipped back.

“I didn’t say anything about being able to hit it, I just said your dainty little handgun won’t kill a deer at 300 yards unless it would be a head or neck shot.”

“What about a heart, spine, lung or liver shot?” the younger fellow tossed back. “Maybe you’ll limit me to just the center of the eye.”

And so it went. Rifleman versus the handgunner. Each believing implicitly that he had the better hunting firearm. Who is right? Is the rifle better than a revolver for big game hunting? As I get ready to cross the Social Security line in life, I’ll refuse to venture an answer to that question for reasons of health; I’m just too old to outrun the rifleman or handgunner.

It does seem obvious that the rifle with a suitable cartridge would be more effective on big game, at least at the longer ranges. It could be the size of the handgun that leads the majority of hunters to feel it is inadequate. Also, big game hunting is seen as a rifleman’s sport, and when handguns began to appear more frequently in the big game woods, a segment of the hunting fraternity denounced the holstered gun as “inhumane.”

That type of thinking is not based on ballistic evidence. Even as far back as the mid-1800s, the 44-caliber Walker Colt percussion handgun with 9-inch barrel could generate over 1200 fps with a 140-grain round ball and close to 900 fps with a 220-grain slug in front of a heavy charge of black powder. I think



**LEWIS tests several loads in Thompson/Center single shot 357 Magnum. The 1½x Lobo scope makes sighting easy. Two rimfire autoloading pistols and a pair of revolvers also will be fired.**

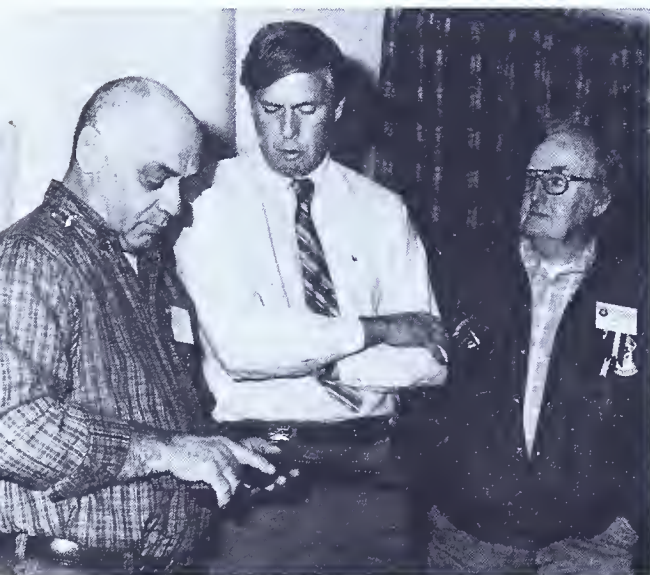
it’s reasonable to assume this 220-grain slug would have generated 600 or more foot pounds of energy at the muzzle.

I’m aware that these figures can easily be questioned, as there were no chronographs or other sophisticated ballistic devices back then. So these are nothing more than figures derived from tests comparing similar modern loads with the loads used then. I have seen data giving higher readings in both categories for the Walker Colt, but my main point is to show the old handgun had a rather stiff punch.

I don’t want to get involved in the history of the revolver, but the handgun wasn’t winning too many friends prior to its adoption by the military. Samuel Colt’s Paterson Colt 1836 model hadn’t stemmed the popularity of the pepperbox design where the barrels rotated instead of a cylinder, and his gun manufacturing days seemed over. But fate intervened.

It all started with men on the western frontier discovering the advantages of a compact side arm. Such a gun had distinct advantages for horsemen in a running firefight with bandits or Indians. The Mexican War finally made the military see the value of the revolver.

The Texas Rangers were involved, and many were carrying the Colt product. Apparently, their enthusiasm convinced the military to take a second look, and Captain Samuel H. Walker was sent to Colt to persuade him to manufacture a bigger and more powerful percussion revolver. Walker was successful in inducing Colt to go back into business, and is also given credit for having a hand in designing the gun which became famous as the "Walker" Colt. It, by the way, was a hefty outfit, running around 15½ inches in length and a shade over 4½ pounds in weight. It's interesting to note that the United States was the first nation in the world to issue a revolver to its troops. The Walker Colt proved to the military the value of a side arm, and at the same time established the revolver as a viable firearm.



**TOM RUGER, center, discusses new Bisley model Ruger with Bob Bell and Don Lewis. Latest Ruger single action resembles popular Colt target handgun of bygone years, is available in both rimfire and centerfire calibers.**

This brings us back to the hunter and the handgun. Well, today's product is vastly superior in every way to the guns of the 1800s. We have better metals, which makes the modern product capable of handling heavier powder charges, and the modern bullet, whether cast or jacketed, is in a class by itself. That doesn't mean that all handgun calibers are satisfactory for deer and bear hunting. Right about here is where an argument can begin.

### **Recoil and Blast**

The Achilles heel of the more powerful handgun cartridges is recoil and muzzle blast. My 44 Magnum Super Blackhawk Ruger can be fearsome. A few shots on the range with full power loads is usually sufficient to convince the novice handgunner that the 44 Magnum is a tough customer to handle.

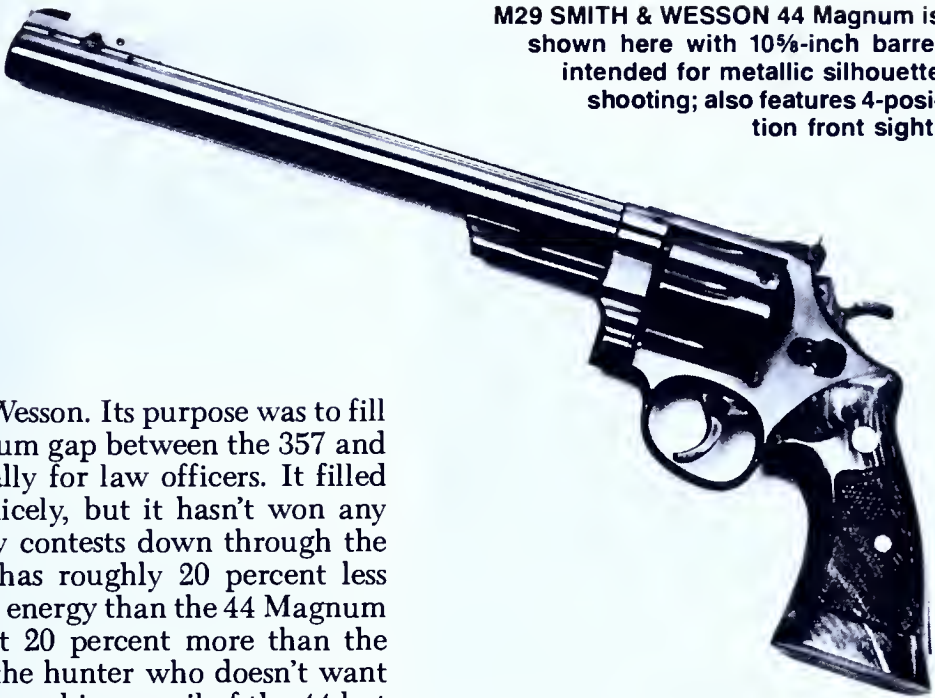
The 44 Magnum cartridge was developed through the combined efforts of Smith & Wesson and Remington in 1955. Since its introduction, the 44 Magnum cartridge has been chambered by many handgun manufacturers, Ruger chambered their autoloading carbine for it, and several lever action carbines also are made for this load. It is the most powerful handgun cartridge in commercial production. I doubt if many handgunners will deny that the 44 Remington Magnum is the ultimate for big game hunting. But don't plan on buying a 44 Mag in mid-November and figure on using it for deer a few weeks later. Unless you are an experienced handgun hunter, there is a long transition road to travel.

Let's drop down the caliber ladder and take a quick look at the 357 Magnum. It came on the scene back in 1935, through the efforts of Smith & Wesson and gunwriter Phil Sharpe. The goal was to improve the 38 Special, and I think it's fair to say the 357 did just that. With full power loads, it offers nearly twice the muzzle velocity and three times the muzzle energy of the 38 Special.

A step up the ladder brings us to the 41 Magnum, developed in 1964 by



**M29 SMITH & WESSON 44 Magnum is shown here with 10 $\frac{1}{2}$ -inch barrel intended for metallic silhouette shooting; also features 4-position front sight.**



Smith & Wesson. Its purpose was to fill the Magnum gap between the 357 and 44, basically for law officers. It filled the gap nicely, but it hasn't won any popularity contests down through the years. It has roughly 20 percent less recoil and energy than the 44 Magnum and about 20 percent more than the 357. For the hunter who doesn't want the hand-numbing recoil of the 44 but desires more power than the 357, the 41 Magnum should be first choice.

I mentioned earlier that one should not buy a powerful handgun and go hunting with it immediately. First, ask yourself why you want a handgun to hunt with. In my estimation, handgun hunters fall into two classes — the dyed-in-the-wool handgun addict and the rifle hunter who decides that switching to a handgun will be more challenging. Since the first category is handgun-oriented to begin with, there is no problem. They feel comfortable with the side arm, plus they also know how to use it. It's the second category that concerns me.

### **Surprise**

The hunter who has bagged 15 to 20 deer with a rifle and thinks downing one with a handgun will be just as easy is in for the surprise of his life. First off, the novice handgunner seldom practices enough to become proficient with the holster gun. Shooting a box or two of ammo a week prior to opening day isn't the type of practice I had in mind. A long transitional — practice — period is necessary when switching to the handgun. I don't like to say this, but a good portion of new handgun converts



**SMITH & WESSON M547 has round grips for handy carrying, is chambered for the potent 9mm cartridge, more often used in autoloading pistols. Below is a closeup of the 547's ejection system for this rimless case.**





**TIM LEWIS**, left, levels down on a target with Ruger SA Blackhawk 357 Magnum. Holster is Uncle Mike's camo "Sidekick." Above, Charter Arms Police Bulldog 38 Special, Law Enforcement version, has hand-fitting neoprene grips, bobbed hammer spur to eliminate snagging when carried in pocket.

will never master the 44 Magnum, especially with heavy loads. Just battling the psychological side of the mighty Magnum is an awesome task.

Any hunter anticipating using a handgun this coming big game season should start right now with a 22 rim-fire revolver. Plan on shooting a lot of ammo just to get the feel of the hand-held firearm. Learn to bring the revolver up in a smooth motion, aligning the sights on the target when eye level is reached and getting off the shot. It's not easy to do and success won't come quickly. Don't confuse this with any type of fast-draw tactics.

### Up the Ladder

When comfortable with the rimfire and scoring consistently at 20 yards, move up the ladder to one of the Magnums. Ruger's new Model 357/9mm Blackhawk fits nicely into this scheme. It comes with interchangeable cylinders for the 357 Magnum cartridge and the 9mm Parabellum. In case the word Parabellum is confusing, it's a Latin word meaning "for war." The 9mm is not the easiest cartridge to reload, but it's more pleasant to practice with than

full power 357 loads. The 357 Magnum is not the greatest big game handgun cartridge, but it will do the trick at short to medium ranges with well-placed shots.

The 41 Magnum has been embroiled in controversy ever since its inception. Whether it's needed or not, it still might be a wiser choice for the hunter who wants more than the 357 offers, but also wants to stay clear of the big 44 Magnum.

Which cartridge is the best? Really, I don't know if that's of real importance. It's far more important for the handgun shooter to become proficient with his own firearm than to use the ultimate load. Fast-draw, long-range and hip-type shooting are not ingredients for big game hunting with the side arm. But learning to put every shot in a 7-inch target at 50 yards with a two-hand hold from a 6-inch barrel will guarantee meat on the table.

Probably the most enjoyable aspect of handgunning, other than actually firing, is bullet casting and reloading your own fodder. From plinkers to big game loads, it can be done on the home level with a significant financial sav-



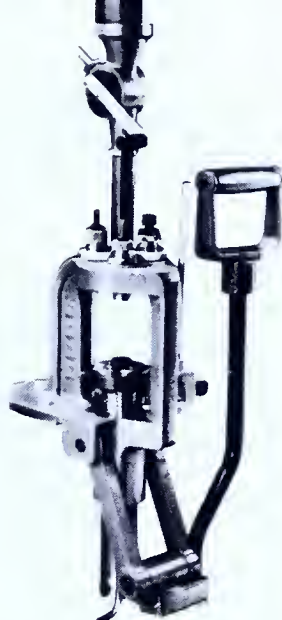
ings and a lot of personal satisfaction.

Any type reloading press will suffice, but the progressive-type is better for reloading handgun cartridges. One of the most interesting is the new RCBS 4x4 rotary press. It's built around a rugged "O" frame. It weighs in at 29 pounds, which gives some idea of its durable construction.

The tool head is drilled and tapped for standard  $\frac{7}{8}$  x 14 reloading dies. Cartridge cases are held in a four-station rotary shell head that moves vertically on a 1½-inch diameter ram. Station to station indexing is done manually. The shell plate moves in counter-clockwise rotation to accomplish the reloading sequence. The 4 x 4 is fitted with an automatic primer feed that uses standard RCBS primer feed tubes.

Total ram stroke is only 3¾ inches

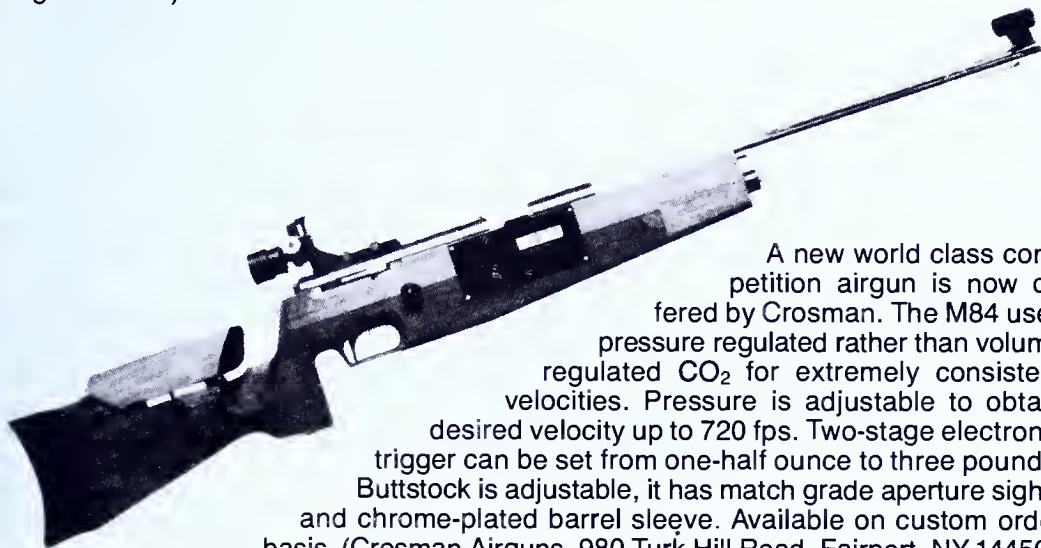
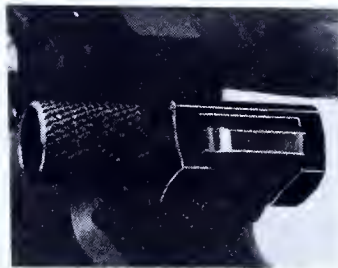
**RCBS  
4 x 4  
Progressive  
Tool**



and cartridges as short as 32 ACP pistol and as long as 375 H&H rifle ammo can be reloaded with equal ease. The 4 x 4 can also be used as a single-stage tool.

## **GUNnews for Shooters . . .**

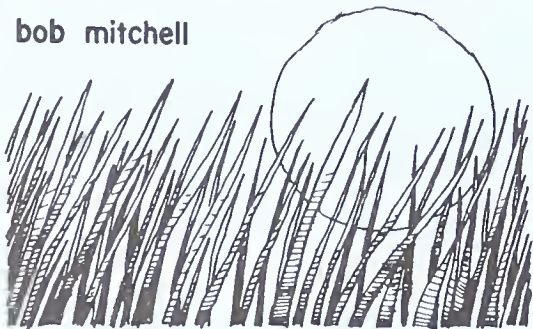
An extension to fit the redesigned hammer in Thompson/Center Contenders (serial number 234256 and later) has been introduced by Michaels. It can be used on either the right or left side. These extensions make it easy to reach hammers beneath low-mounted scopes. Available for most rifles and handguns which have exposed hammers. (Michaels of Oregon, P.O. Box 13010, Portland, Oregon 97213.)



A new world class competition airgun is now offered by Crosman. The M84 uses pressure regulated rather than volum regulated CO<sub>2</sub> for extremely consistent velocities. Pressure is adjustable to obtain desired velocity up to 720 fps. Two-stage electronic trigger can be set from one-half ounce to three pounds. Buttstock is adjustable, it has match grade aperture sights and chrome-plated barrel sleeve. Available on custom order basis. (Crosman Airguns, 980 Turk Hill Road, Fairport, NY 14450.)

# *In the wind*

bob mitchell



Animal behavior specialists from Penn State recently completed a two-year study comparing the success of pen-reared and wild trapped pheasant stockings. By tracking radio-equipped birds, researchers discovered that 100 days after release 70 percent of the wild-trapped birds were still alive, but only 10 percent of the game farm birds and 40 percent of the commercially raised birds survived that long. Most pen-reared birds were killed within two weeks by predators—mostly by foxes, but also by dogs, hawks and owls. In concert with these findings, the Game Commission has modified its pheasant rearing facilities to better duplicate natural environments and to minimize human exposure to growing birds. All those involved with the project, however, feel modern agricultural practices preclude the likelihood of pheasants ever again occurring in numbers comparable to those of the recent past.

After a four-year moose study, officials of Vermont's Fish & Wildlife Department have concluded that the state's moose population cannot, at this time, support even a limited hunt. Moose, which are concentrated in the northeastern part of the state, have increased to a high of 600 due to increasing logging activities. Roadkills and poaching, however, are keeping too many moose from reaching maturity and a stabilization of the herd.

**The list of endangered and threatened species totals 828—297 mammals, 220 birds, 99 reptiles, 85 plants, 62 fish, 24 clams, 16 amphibians, 12 insects, 9 snails, and 4 crustaceans. Of these, 331 are found in the United States.**

In 1983 ornithologists discovered exactly where in South America many purple martins spend the winter. This past January a team of specialists from the Nature Society and the U.S. Fish & Wildlife sprayed 250,000 purple martins with ultraviolet paints. A different color was used at each of five wintering locations in an effort to correlate South American wintering locations with North American nesting spots. As of this May, three marked birds had been located by purple martin landlords who had the special lights needed to detect the paint. Two from different winter roosts were found at the same site in Texas, indicating a mixing of winter flocks. The third was located in Missouri.

As reported in the Wildlife Management's "Outdoor News Bulletin," a Louis Harris public opinion poll indicates a large majority of Americans not only support existing environmental regulations, but most also want tougher ones. Of 10,000 individuals surveyed, 85 percent favor strict enforcement of environmental laws, and 65 percent want more stringent clean air and water laws. It was also reported that these results run contrary to the current administration's general philosophy of ignoring environmental concerns in favor of economic considerations.

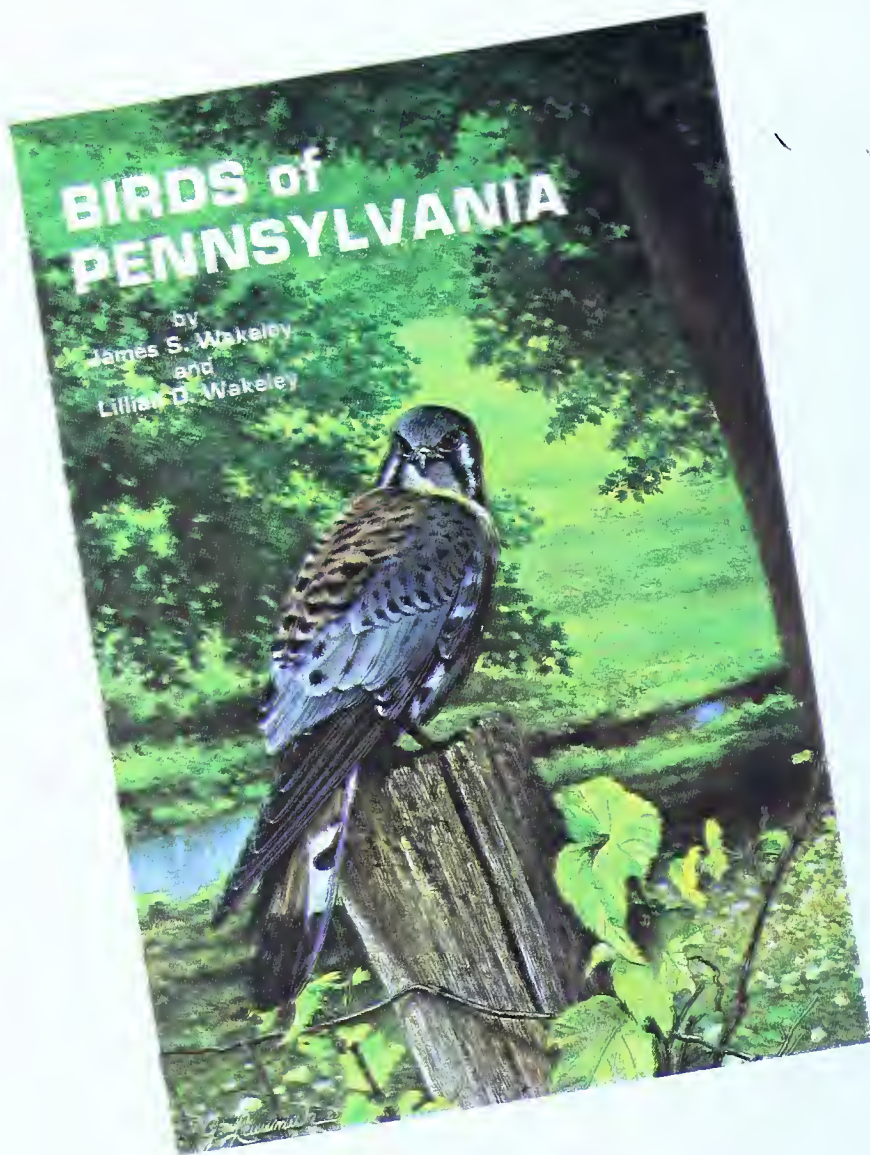
**In an effort to demonstrate how helpful wild animals can be to people, representatives of the Friends of the Sea Lion Marine Mammal Center trained two sea lions to be lifeguards. As reported by the National Wildlife Federation, the sea lions, which can swim 25 miles an hour, are being evaluated this summer at Laguna Beach, California.**

Researchers with the Dane-Murdough Laboratory, affiliated with Massachusetts' Farmington State College, are evaluating the use of sound spectrographs to differentiate individual common loons. While most species of birds are leg-banded for such purposes, banding loons is difficult and unusually stressful on this species. Because there's a tremendous variation among the songs of loons, researchers feel a comparison of the spectrographs produced from recordings of yodeling loons will eventually permit not only the identification of individuals, but also provide much needed information on the species' natural history and behavior.





*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in GAME NEWS. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



*Birds of Pennsylvania: Natural History and Conservation*, a completely new book by Jim and Lillian Wakeley, includes the most up-to-date information on bird biology and behavior, and the kinds of birds commonly found in the state, arranged according to the type of habitat where they are most likely to be seen. This 214-page hardcover book, supplemented with 40 full-color pages featuring the Game Commission's popular bird charts and previous GAME NEWS covers, is being sold for \$10, delivered.

Make check or money order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**  
P.O. Box 1567  
Harrisburg, PA 17105-1567



# PENNSYLVANIA GAME NEWS

SEPTEMBER, 1985

60 CENTS







### **Voluntary Waterfowl Stamp No. 3**

Pennsylvania's 1985 waterfowl management stamp, created by Ned Smith, is the third such stamp offered by the Game Commission to provide waterfowl enthusiasts and stamp collectors an opportunity to help protect and manage waterfowl in the state. Funds derived from these sales are used for waterfowl habitat acquisition and development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Available at the Game Commission's Harrisburg office, regional offices, the Pymatuning and Middle Creek Wildlife Management Areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints are available from art dealers and galleries nationwide. Collectors note: The agency's first stamp, issued in 1983, featuring a pair of wood ducks, will be available only until December 31, 1985, at which time remaining supplies will be destroyed.



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doeblar, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starner**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**GAME COMMISSION**  
(717) 787-4250

**FEATURES**

<b>The Dove Hunter's Dream</b> .....	3
By Jim Bashline	
<b>DER and PGC Working Together</b>	
<b>For Wildlife</b> .....	7
By Albert Schutz	
<b>Jason's Hunt</b> .....	10
By D. A. Nevius	
<b>State Game Lands—Investments in</b>	
<b>the Future</b> .....	13
By Bob Mitchell	
<b>My Walking Stick</b> .....	18
By K. D. Pritts	
<b>The Ultimate Sportsman</b> .....	19
By Richard W. Tomlinson	
<b>The Golden Age</b> .....	22
By Paul A. Matthews	
<b>Wildlife In School . . . ?</b> .....	26
By Dean Fromm	
<b>Nature's Explosive Violence!</b> .....	28
By Thad Bukowski	

**NEWS**

<b>Field Notes</b> .....	34
<b>Conservation News</b> .....	39
By Ted Godshall	
<b>Books in Brief</b> .....	51 & 59
<b>In the Wind</b> .....	64
By Bob Mitchell	

**COLUMNS**

<b>Young Artists Page</b> .....	33
<b>GAMEcooking Tips</b> .....	42
By Carol Vance Wary	
<b>Another View</b> .....	44
By Linda Steiner	
<b>Outdoor Wildlife Learning</b> .....	47
By Bill Einsig	
<b>DGP Diary</b> .....	49
By Joe Carlos	
<b>Thornapples</b> .....	52
By Chuck Fergus	
<b>Switch Shooting (Archery)</b> .....	56
By Keith C. Schuyler	
<b>The Sight Program (Guns)</b> .....	60
By Don Lewis	

**COVER PAINTING BY DENNIS BURKHART**  
(Cover Story on page 9)

PENNSYLVANIA GAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Second-class postage paid at Harrisburg, Pa. CHANGE OF ADDRESS: POSTMASTER: Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1985 by the Pennsylvania Game Commission. All rights reserved.

*NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.*

# Three Reasons Why You Should Participate in National Hunting and Fishing Day

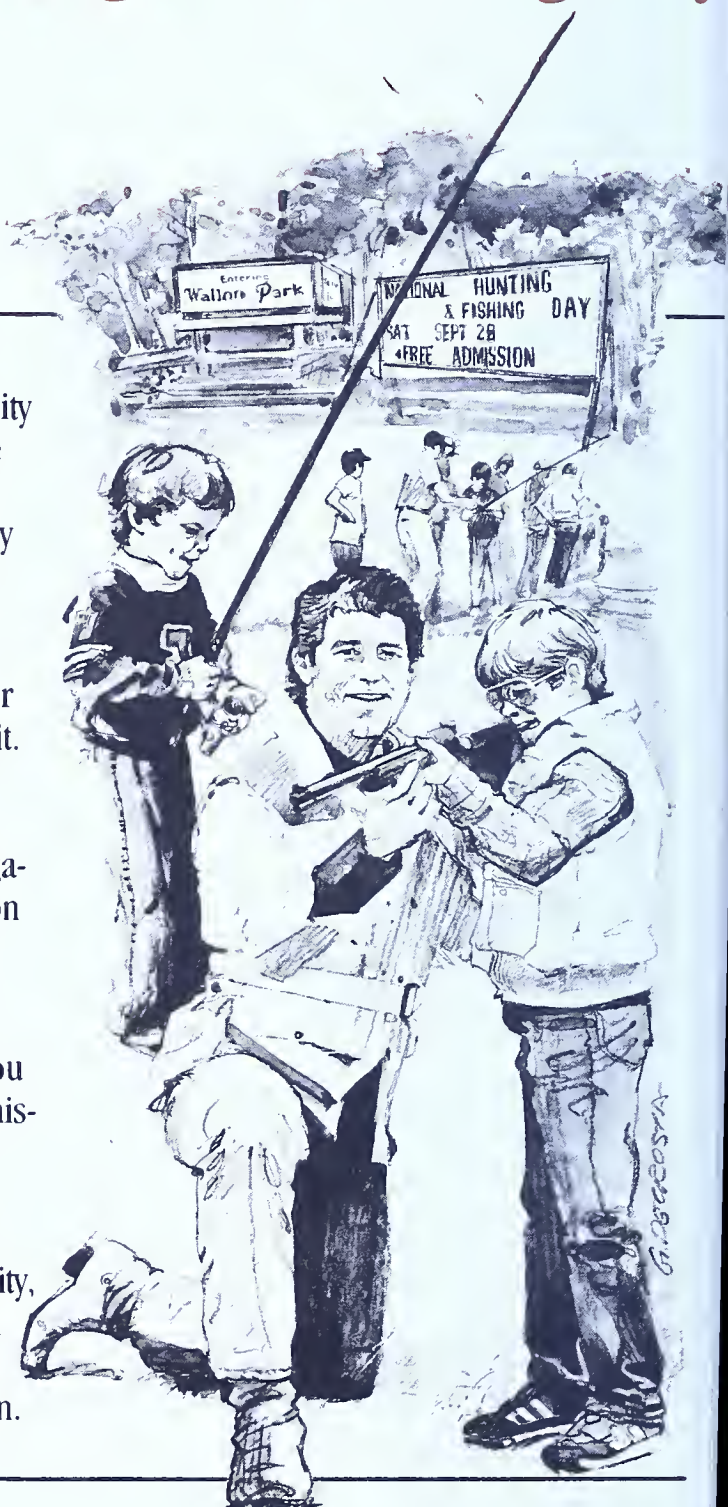
---

**1.** It's fun. It's an opportunity to share the excitement you've experienced with people who have never had the opportunity to enjoy the outdoors as you have.

**2.** Your sportsmen's club or conservation group can benefit. You can gain new members, favorable publicity and foster cooperation between your organization and other conservation and sportsmen's groups.

**3.** You can help ensure a healthy future for the sports you enjoy. Too many people still mistakenly think all hunters and fishermen are "the bad guys." When you sponsor a National Hunting and Fishing Day® activity, you have an opportunity to tell these non-sportsmen the facts about wildlife and conservation.

---



**September 28, 1985**



# The Dove Hunter's Dream

By Jim Bashline

**A**MONG big game hunters, there are several plateaus of recognition. In the western half of North America, the peak of success with a rifle is generally considered to be the Grand Slam. It involves the shooting of a Rocky Mountain bighorn, a Dall ram, a Stone sheep and a desert bighorn. Few hunters have accomplished this feat. These four far-sighted sheep aren't found in the same locales, so finding one of each requires traveling from the near arctic to the near tropics — time consuming and expensive. Then there is the Big Five of African hunting. They include the elephant, Cape buffalo, rhino, lion and leopard. (Some consider the kudu part of this elite grouping . . . so maybe it should be the Big Six.) Pulling off this hunting accomplishment may or may not be as difficult as the Grand Slam but, in this day of restricted African travel, doing it is certainly something to write home about.

## Triple Trophy

Speaking of home, however, and coming closer to it, we have the triple trophy accomplishment right here in Pennsylvania. A buck, a bear and a gobbler in the same season ranks right up there with the greatest of hunting accomplishments. Granted, an occasional hunter has dumb-lucked his way into this stratospheric group, but not too often. A lot of hunting and doing it well is the way this feat is most often realized.

But there is another level of performance that is talked of in Keystone State hunting circles. It is the nearly unattainable "straight dozen" on mourning doves. In most states — all that I'm familiar with — 12 doves constitute the daily bag limit. That's right, we're speaking of going 12 for 12, no misses

— pocketing 12 mourning doves with 12 shots.

For those of you who have not enjoyed shooting at these F-14 fighter planes disguised as gray birds, that feat may sound like child's play. After all, say the uninformed, "You mean those cooing birds that sit so trustingly on telephone lines? You mean to tell me that shooting 12 in succession is difficult?"

Well, pilgrims, as ol' Duke Wayne used to say, you can't believe the things that can happen when one loads a shotgun and decides to challenge their flight patterns. They do more tricks in the air than a circus monkey on a mile of grapevine, and it is the rare shotgunner who cannot be sent home with tears in his eyes, wonder in his heart, a half bushel of empty hulls . . . and a half-empty game pocket. Going 12 for 12 on doves is, in my opinion, the absolute peak of shotgunning. Fifty straight hits on the trap or skeet field is beginner's stuff compared to it. I have never done it, have never seen it done, and have only heard of it being done a half-dozen times. And four of those supposed





dlbuckhof



miracles were not witnessed, so who knows for sure?

Now, as a result of this story, I'm sure I'll be hearing from several smoothbore hotshots who have done it. And if they say they did it, why they probably did. But on one September evening back in 1964, I saw Bill Britton, former Law Enforcement Chief of the Fish Commission, and the late Mert Golden, once Executive Director of the Pennsylvania Game Commission, nearly do the impossible. They brought down 23 doves with 25 shots, each of them coming within an ace of the perfect score. I was there and here's how it happened.

During the '60s there was a highly used dove roosting area on a farm just south of Mechanicsburg in Cumberland County. It was one of the finest dove shooting setups that ever existed. For obvious reasons I won't pinpoint the location, but some hunters will probably guess where it was. There was a windbreak of spruce and pine trees along a lane that ran between two cornfields. At both ends of the windbreak, former pastures had been allowed to go wild and contained mostly foxtail and ragweed. It was an ideal dove smorgasboard, and several thousand doves congregated there.

Local doves were usually joined by migratory birds, and the entire month of September provided topnotch shooting. Shooters would station themselves a hundred yards away from the roosting area and take incomers and outgoers in equal numbers.

Perhaps a dozen dove hunters showed up on this particular evening, and among them were Mert Golden and Bill Britton. Their wingshooting abilities were and still are spoken of in reverent terms by those who had seen them shoot a smoothbore. My memory is a trifle hazy regarding the gauge each was using that evening, but I'm quite sure both were carrying Browning overunders. They hadn't driven to the roost together, but I learned later that each had known the other would be there, and since they were friendly shooting competitors had made some sort of

wager (?) on the outcome of the evening's business. They stationed themselves on a slight knoll about 80 yards from my stand and took shooting positions about 40 yards apart. I had a ring-side seat.

I had killed four or five doves before Mert and Bill arrived, but I knew there would be other days to hunt so I quit shooting to see how these two legendary shotgunners would perform. The birds began to move well, and it was obvious Bill and Mert would have no trouble in selecting the shots they wanted. And when it can be done, selecting your shots is about the only way 12 for 12 can happen. If one simply takes all shots as they present themselves, a poor guess is bound to be made and there goes the batting average.

### Lines In the Earth

Mert took the first shot and the dove dropped like it had struck a brick wall. Britton countered with similar results and I squatted down and began to mark lines in the soft earth in front of me with a stick. One for Mert, one for Bill. The birds were coming fast and I had to watch carefully and mark quickly to avoid making any mistakes. I was kept busy!

Before more than ten minutes had passed, Mert had downed 8 doves in a row with 8 shots and Britton had 9 for 9. Wow—neither of them was too far from the perfect score, and I might be witness to an event that would be recalled in song and verse for years to come!

On his ninth shot, Mert slipped up. Well, it wasn't really a slip-up—the bird zigged and Mert zagged at the critical second and the dove was feathered lightly but continued to fly towards the roost. He gave it the second barrel, which may or may not have been necessary as the bird was slowly coming down, and it finally folded. I could hear him muttering something about that particular dove's ancestry. Good for him. The cripple didn't escape but his hope for a string of 12 for 12 was shattered. He quickly went on to fill out the

12 bird limit, not missing another shot.

Britton was still watching.

Two more fair opportunities passed over Bill's station, but much to Mert's consternation he didn't shoot. Mert mumbled something like "Come on, Bill, if I waited until they flew right down the gun barrel, I wouldn't have had to take that extra shot."

Britton said nothing and a minute later swung quickly on an incomer. A puff of gray feathers put another dove on the ground. Number 10.

### No Chances

Another high shot or two was not attempted, and Mert was having a fit. Then a pair of birds came from left to right, just loafing along, and I couldn't help but wonder if Bill might try to finish up the evening with not only a perfect score but do it with a flourish on a double. He took no chances. He popped the lead bird, number 11, and as it spiraled down, ever so slowly and with great deliberation, he ejected the spent shell and plucked a fresh one from his vest.

Bill looked at that shotgun shell for what seemed like a full minute, as if wishing a special magic could be inserted into the pellets. This would be the single round that could make his day – and slightly spoil Mert's. The shell was finally dropped into the chamber and he closed the gun in an almost tender way. Mert said nothing. The tension was gathering for both of them, and while I was merely a spectator, I noticed an extra dryness in my throat. Here were two of the finest wingshooters in Pennsylvania going head to head, and they had already killed 23 doves with 24 shots!

Bill was watching the sky with such intensity that it's a wonder his eyeballs didn't leave their sockets. So was Mert. A half-dozen birds came past Bill at an extreme angle from left to right, and I was sure one of them would be popped because he liked that sort of shot. They were easily within range, no more than 20 yards away, yet he brought the gun down after swinging through them. His

shoulders hunched and it wasn't difficult to tell that he'd had second thoughts about shooting. Now a single incomer was boring straight toward him. This bird obviously had a death wish. It was coming just right, 18 or 20 yards high and maybe three or four degrees to the right. A perfect incomer. A bird coming from dead ahead can sometimes cause a miscalculation of distance. Shoot too soon and the bird flies over the pattern. Shoot too late and the angle becomes too severe. The shooter discovers he's almost bending over backward as the trigger is hit. . . . and the bird is long gone when the pellets arrive.

Pow! Time was suspended for a second or two. I gulped. I think I heard Mert gulp. Bill's gaze tracked the bird for 100 yards, waiting for it to fall. We all did. Not a feather dropped. The bird simply flew into the top of tall white pine and fluttered into roost. Bill hadn't bothered to fire the second barrel. Doing so hadn't occurred to him. It was a clean miss. Mert stood there for a full minute and then walked toward Bill.

They shook hands, unloaded their guns and started back to the lane where their cars were parked. I wondered why Bill hadn't taken his last dove. There was shooting time left on the clock and plenty of birds were still trading back and forth. Was he so dejected he didn't want to shoot again? Was he afraid he might begin a string of misses? Whatever the reason, I was glad he hadn't shot again. He had gone 11 straight and until that moment I had never seen anyone do so well on doves.

To this day, at least until he reads this, Bill Britton doesn't know that I was watching that evening. It wouldn't have been proper to intrude on the moment. But I'm sure glad I was watching. Remembering that time consoles me when I don't do as well as I think I should on those deceptive doves. In the end, it probably doesn't matter if one "picks" his shots or simply takes 'em as they come. The results won't be all that much different . . . and the ammunition companies will love you.





**TWENTY STICKS OF DYNAMITE and 500 pounds of ammonium nitrate blast pothole for waterfowl in Forestry Department-Game Commission cooperative project.**

# **DER and PGC**

## **Working Together For Wildlife**

**By Albert Schutz**

**Assistant District Forester, DER**

**T**HE MATURING bubble of an idea erupted with a tremendous blast that echoed over much of the 42,000-acre State Forest in northwest Sullivan County and sent a loud signal that culminated a cooperative effort for wildlife with the Pennsylvania Game Commission. But even as tons of blue clay and debris splattered and rattled back down, those of us standing safely back from the explosion wondered if our efforts would be successful.

It all started with information obtained from a project in Minnesota. Natural waterfowl areas in that state had been enhanced by blasting to create artificial potholes. My job, as assistant forester for Wyoming Forest Dis-

trict No. 20 in the Department of Environmental Resources with offices at Bloomsburg, had involved me in a project to provide duck nesting sites at five shallow water locations in the State Forest. These natural swamps had been improved by beaver activity. The animals had raised the water level so that as much as four acres provided natural habitat for waterfowl.

However, the natural ponds formed in such areas were surrounded by thick cattails and other vegetation that did not permit waterfowl to raise their young without exposing them unduly to predators in these remote areas. Our ongoing program of wildlife habitat improvement included the erection of



**ONE OF THE** nearly 50 duck-nesting houses built by District 20 foresters which have been erected at various places in State Forest.

nesting boxes, and we were having some success as evidenced by eggshells and other signs of use. But other signs indicated considerable predation.

Our nesting boxes are placed in winter months when footing is firm and sites are more accessible. Inspections are also made at such times. For example, in one area the timber sale marking crew had left a high percentage of cucumber trees up to 20 inches in diameter. Their knobby fruit clusters provide an excellent source of fall food for wildlife. Beavers had built a dam of about four acres that provided habitat for waterfowl, but the young forest remaining provided few opportunities for cavity nesting fowl, mainly wood ducks, to establish seasonal residence. And most of the cucumber trees had been felled by the beavers after their arrival. Help was needed.

A hollow basswood tree, cut in two-foot sections, provided a number of crude but natural nesting cavities. Tops and bottoms for each were made with rough lumber, and a four-inch hole was cut into the side for entry. With wood shavings provided as nesting material, these boxes were placed on poles and set through the ice in January and Febru-

ary, beginning in 1981. By 1984, five sites had received 65 nesting boxes, and there was evidence that 37 were utilized. Wood ducks, mallards, and some unidentified birds had been our guests. An additional 12 boxes were placed this past winter.

However, there was need for habitat improvement. Thinking back to the Minnesota experience, consultation was made with the Game Commission's northeast division land manager at Dallas, John Booth, and waterfowl biologist Fred Hartman, of the Middle Creek waterfowl refuge. They believed that better habitat could be effected by creating several potholes with connecting channels.

It was first thought that a bulldozer or a backhoe could be utilized to dig the holes and channels. However, closer examination of the base soil stratum proved it to be blue clay, which is all but impervious to digging where there are wet conditions. Final decision was to use a combination of dynamite and ammonium nitrate to blast both the channels and potholes. Booth and Lee Harshbarger, of the Game Commission's northeast staff, are licensed demolition experts, and they made plans. Fish Commission Waterways Patrolman Frank Kann was notified, as this was essentially a water project.

#### Four Potholes

A pattern was proposed to create four potholes some 50 feet in diameter, three to four feet in depth, and about 150 feet apart. A channel would be made to permit access from one to the other, and to open water. One of the larger pools was chosen for the first shooting in February of 1984.

The initial problem was to create a hole through eight inches of ice that would be large enough to accept a 50-pound charge of ammonium nitrate and dynamite. Since there are few stones or gravel in the area, a hole was cut with a chainsaw through the ice and underlying sphagnum moss and roots. Further needed depth was obtained by using post hole diggers and



shovels. Ten holes were dug in a 25-foot circular pattern, three feet apart, and each was loaded with two sticks of dynamite and 50 pounds of ammonium nitrate.

Water immediately filled such holes, and it was necessary to place the dynamite and ammonium nitrate in plastic bags along with the electric cap. Once the bags were in place, clay had to be added on top to anchor them against a tendency to float to the surface. In all, just preparing the first site took considerable manpower. But finally everything was in readiness and all workers were safely dispersed. It was close to noon. Five hundred pounds of ammonium nitrate, in total, detonated with twenty sticks of dynamite, can make quite a bang.

It did.

Almost immediately the holes and ditches created by the explosion began to fill with water—but not before we could observe the successful effects of the effort. Net gain in depth was from 3½ to five feet.

Another hole was blasted the same day, but it was decided to defer additional blasting for about two weeks. This would enable northeast land managers of the Game Commission to take part as a training session. Equally successful results were obtained on the second try when two more holes were created and channels were blasted to join all of them to provide water access to the pond.

Subsequent checks revealed that at least one pair of geese had raised a brood at the improved site in the following months. Hopes are for continued

wildlife activity at this and other such areas.

Wyoming Forest District No. 20, comprising the five counties of Columbia, Sullivan, Montour, Northumberland and Luzerne, has created a diversity of wildlife programs through Forestry Wildlife Biologist Dan Devlin who approved and coordinated this waterfowl habitat improvement effort. Included in programs in the district have been the planting of over 150 apple trees on 15 sites, erection of over 100 bluebird nesting boxes, and planting of wildlife preferred shrubs in continuing cooperation with Game Commission intention.

### Directly Related

Although the pond project was by far our most spectacular wildlife project to date, it should be noted that 10 to 15 percent of Bureau of Forestry work is directly related to wildlife conservation. When timber sales are consummated, small open areas are maintained for wildlife favored grasses and shrubs. Old and rotting trees with little timber value are left standing for birds and animals that prefer cavity nesting. Where trout streams flow through proposed timbering, a corridor of 400 feet of standing trees is saved from cutting to maintain a pristine atmosphere and to protect the streams from erosion.

At least once every 15 years, wildlife habitat practices are reviewed and a plan set up prescribing various procedures for the future. When it comes to encouraging and preserving wildlife and their habitat, we are all in this together.

## Cover Story

Many hunters go after doves just to sharpen their wingshooting reflexes in anticipation of upcoming grouse, pheasant and waterfowl seasons, and there's nothing wrong with that. But over the years many hunters have discovered the dove is a top-notch game bird in its own right. Few other species provide as much shooting—missing—opportunities as waves of darting doves do, and they make excellent table fare, too. If you've yet to discover the excitement of September's bird, grab plenty of shells and head for the dove fields.

“LET’S CHECK just one more time,” Ed said. “We have to make sure we have everything.”

Jason went through the list. “Shells, rifle, thermos, blaze orange hat, license—oh yeah, I almost forgot my new binoculars. They’re in the bedroom. I’ll get them.”

a scarce commodity the night before buck season.

The clock showed 4:28 as Ed turned off the alarm and crept out of bed. Within minutes the smell of coffee and bacon filled the kitchen and began to filter down the hall to Jason’s room. There’d be no need to wake him, Ed

## Jason’s Hunt

By D. A. Nevius

Ed watched his boy leave the room, feeling a sense of pride as he thought about the next day. A day he and Jason had looked forward to for a long time, Jason’s first deer hunt.

Ed checked his heavy Woolrich hunting jacket with the rectangle of orange sown on the back. He wouldn’t be needing that this year, he thought, as he took an orange vest off the hanger.

Jason returned with the binoculars and a smile. “I would have felt terrible if I’d forgotten these.” He laid them on the floor next to his other equipment. “I never thought you and Mom would get them for me.”

“Let’s go, Jason, time for bed,” Ed said as he mentally checked the list just one more time. He wanted everything to be perfect.

The light went out and Ed left the room with a cheery “Good night.”

“No complaints about going to bed?” Janet asked as Ed came back into the living room where she had a cup of coffee waiting for him.

“Well, he’s in bed but I doubt he’ll get much sleep. He’s really excited about tomorrow.”

“Ed . . .” Janet said.

“Yes,” Ed interrupted, anticipating the question he had heard a thousand times since September, “I think we’re doing the right thing.”

A good night kiss and Ed too was off to bed. One thing he had learned in thirty-three years of hunting was that no matter how old you were, sleep was

thought. He poured coffee into his thermos and hot chocolate into Jason’s.

Within minutes the two had finished breakfast, cleaned up, and were driving down the main street of town, heading for Route 44 and the Pine Creek valley.

Jason was surprisingly quiet on the drive, sleep not yet ready to loosen its grip on the twelve-year-old.

Ed eased the Scout off the main road and began a slow careful trek up the dark mountain. Fresh snow covering the ice made the trip more slippery than usual, and Ed was glad he had purchased the old four-wheel-drive from his brother-in-law.

Dawn was still a half-hour away when the pair slid the final few yards off the road and settled in alongside an open field.

“Do you think any deer will cross here this morning?” Jason asked as his father poured hot drinks from the thermoses.

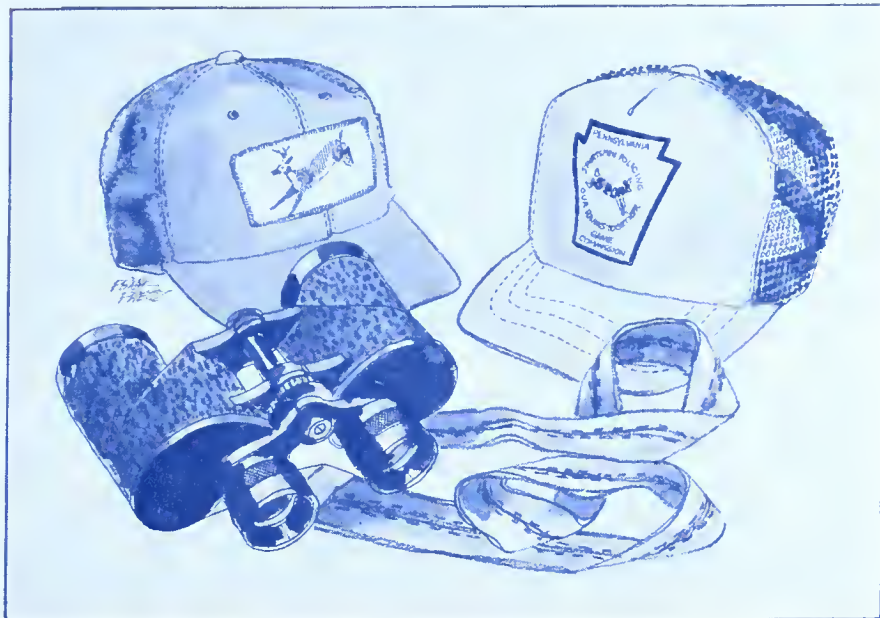
“Once the shooting starts, deer could be anywhere. There was a newspaper story the other day about a buck that ran right into the middle of town and crashed through a shop window in Pittsburgh.”

Dawn was breaking over the horizon as Ed reached into the back seat and pulled the little 243 from its case.

“Here, hold this. But don’t load it until I tell you to.”

Ed put on his orange hat with the SPORT insignia on the front and





handed Jason his. "Roll down your window, and keep your eyes open. Here are your binoculars."

Jason stared out the window, trying to get his eyes adjusted to the dim light. A shot rang out far down the valley, off to his left. Then another and another.

"That deer is running for the next county," Ed said.

Jason gave him a long hard look, silently reminding him to be quiet when hunting. Embarrassed at his slip, Ed resumed watching the field on his side of the road.

Time passed slowly, and Ed felt his legs begin to cramp.

Jason sat looking out his window.

"Dad," Jason said quietly, "Over by the big oak tree. There's three deer moving toward the stream."

Ed strained his eyes to make out what the young boy saw. Sure enough, several vague shapes were moving there.

"Get your binoculars up and let's see what they are," Ed said, his own binoculars snapping to attention.

"The first two are doe, but the last one is in the woods too far for me to tell what it is."

Ed got out and rested his elbows on top of the car to steady his binoculars. "It's a doe, Jason."

The deer ambled off and the excitement for the moment was over.

Ed got back in the Scout, poured some more coffee, and rolled his window down a little farther so it would not steam up.

The day went on, quiet for the most part, eventually turning to dusk. Finally the quitting hour arrived. No more deer had passed the car, and it was a long quiet ride home. Jason lost his battle with heavy eyelids and Ed rode the last half of the trip in the company of his thoughts.

### Not Normal

The day, by normal standards, had been poor. But Ed could not look at it as a normal day. He had seen his son realize a dream he'd had ever since he was nine years old. And although there was no deer on the roof rack of the Scout, he felt his son had grown a little since they pulled out of the driveway this morning.

Janet was waiting at the door as the Scout pulled into the driveway. Ed put his finger to his lips as she approached and saw the boy asleep in the front seat.

"How did it go?" Janet asked. "Did he do all right?"

Ed lowered the tailgate of the Scout and pulled the wheelchair from the back.

"Fine," Ed said. "He did just fine."

# Vision Hints For Hunters

**T**HE Pennsylvania Optometric Association (POA) says that many hunters are unaware that their vision is defective; they think they see just fine, while others hesitate to admit they have a problem for fear they must give up their sport.

According to the POA, however, most vision defects can be corrected and it is unusual to have to give up hunting. The POA urges all hunters to have a thorough vision examination before going on a hunting trip. Vision changes are subtle and often go unnoticed.

The POA offers the following checklist to hunters to ensure their outdoor pursuits will be safe and successful:

- Check your eyewear: Even if you don't need corrective eyewear, you should make impact-resistant eyewear an essential part of your hunting gear in order to protect eyes from flying shot, tree limbs and other hazards.

- Check your sunwear: On bright hazy days, quality sunglasses are essential in avoiding the hazards created by glare. Gray tinted lenses are your best choice because gray does not interfere with color perception.

- Check your gunsight: Your eyes and the gunsight work as a team. In order to zero in on your target, keep your vision needs in mind when selecting a

gunsight. The most visually demanding sight is the open iron sight, which requires the ability to change focus from near to far quickly. The peep sight minimizes the need for the eye to change focus and tends to increase depth of field. The telescopic sight, on the other hand, eliminates the need to change focus for nearer distances while aiming and is a good choice for the older hunter experiencing a natural loss of his eyes' focusing ability.

- Check your wearing apparel—don't be mistaken for game. Select clothing that doesn't blend in with the environment. Anyone hunting bear or deer during the regular firearms seasons or woodchucks must wear at least 100 square inches of fluorescent orange material. Woodchuck hunters must wear fluorescent orange on the head. Fluorescent orange is the only safe color under all weather and light conditions.

- Check your sighting skills: Optometrists advise that a hunter's aim will be better if he sights with his dominant eye and if he keeps both eyes open when sighting. Usually the dominant eye is on the same side as the dominant hand.

For more information and a free Hunting and Vision pamphlet, contact the Pennsylvania Optometric Association, P.O. Box 3312, Harrisburg, PA 17105.

## B&C Lowers Minimum Scores for 19th Program

The Boone and Crockett Club has announced lowered minimum entry scores for certain hunter-taken trophies entered in the 19th Big Game Awards Program, which closes on December 31, 1985. Trophies taken by hunters during the four years preceding the closing date and meeting the requirements will be eligible for inclusion in the 19th Awards record book. This one-time listing will allow greatly increased trophy recognition without increasing the number of listings in the All-Time records book. Minimum scores for inclusion in the All-Time book have not been reduced. The new minimum qualification scores for the 19th Awards book, of interest to Pennsylvania hunters, are: black bear, 20; typical whitetailed deer, 160; and nontypical whitetailed deer, 185. (Minimums for the same species in the All-Time book are, respectively, 21, 170 and 195.) For free detailed information on trophy entry procedures, write to: Boone and Crockett Club, 205 S. Patrick St., Alexandria, Va. 22314.





Dick Fagan

**SINCE 1920, the Game Commission has been buying land and making it available for use by hunters and other outdoorsmen.**

# State Game Lands — Investments in the Future

**By Bob Mitchell**

**Assistant Editor, GAME NEWS**

**L**EGISLATIVE approval to purchase land was received in 1920, when the Game Commission was 25 years old. Since that time, the agency has acquired 276 tracts which total 1,290,282 acres. Although most of these were acquired in the 1930s and '40s, when land was more available and affordable than now, land acquisition continues to be a major priority. In the past five years, the Commission has purchased 60,603 acres at a cost of \$12,248,572. Roughly \$3 million is budgeted annually for land acquisition.

The 1920 legislation enabling the Game Commission to buy land stipulated that no more than \$10 per acre could be paid. This limit has been raised over the years in an effort to keep pace with inflation and escalating land values. Today, up to \$300 per acre may be paid.

The agency's first acquisition goals were to establish State Game Lands to provide public hunting areas readily accessible to all Keystone State hunters. That has been accomplished. The Commission owns land in every county except Delaware and Philadelphia.

Today, high priority is placed on obtaining tracts adjacent to existing Game Lands and on eliminating interior tracts, those that lie wholly within an existing Game Lands. These additions are the most economical, and are especially beneficial to wildlife. They are easily incorporated into existing management plans, resulting in increased benefits to wildlife and outdoorsmen at minimum expense and in relatively short time. When these tracts border roads, they provide users with convenient access — and providing public access is an important component



**OVERNIGHT CAMPING** is prohibited on Game Lands except for backpackers on the Appalachian Trail, where special provisions are in effect.

in a management plan, a component that often goes unnoticed or is taken for granted by users.

While properties meeting these criteria are, in many respects, the most desirable, the agency maintains an acquisition policy flexible enough to accommodate other purchases as they become available.

Since January 1983, the Game Commission has purchased 75 tracts. Of these, 69 were adjacent to existing State Game Lands, two were indentures—purchased to straighten boundaries—one was an interior acquisition, and the remaining three were purchased as new State Game Lands. These tracts range from three to 16,672 acres in size. Prices were from \$65 to \$1200 per acre.

Most tracts are purchased at the Commission's maximum purchase price of \$300 per acre or slightly less. In many instances, however, the agency receives lands that actually sold for more than the \$300 rate. This happens under two basic circumstances: 1) through a cost sharing purchase in which federal funds are used to pay 50

or 75 percent of the selling price, or 2) through conveyance where a conservation organization buys property and then sells it at a loss to the Game Commission.

The \$1200 per acre mentioned earlier was paid for a 690-acre tract adjacent to SGL 43 in Chester County. Pittman-Robertson funds were used to underwrite 75 percent of the cost. Land such as this, in the southeastern corner of the state, doesn't become available often. When it does, it's expensive. Therefore, a tract of this size, adjacent to an existing Game Lands, was considered especially valuable, well worth the relatively high price in terms of providing both the needs of wildlife in an area where they are often ignored, and the needs of outdoorsmen where public lands are becoming increasingly difficult to find. This is a classic example of how the federal excise tax on firearms and ammunition benefits wildlife and all outdoor enthusiasts.

The Lehigh Valley Conservancy and the Western Pennsylvania Conservancy are private conservation organizations which provide a great service to the Game Commission and outdoor enthusiasts. Many properties which become available and meet agency needs are valued at more than \$300 per acre. Oftentimes, when this occurs, a conservancy will buy the tract and sell it to the Commission at a reduced rate. In this manner these organizations, through their members, make valuable contributions to conservation in Pennsylvania, contributions that un-

The first article in this series covered a brief history of the Game Commission's land acquisition program. The second provided an organizational outline of the agency's Bureau of Land Management, highlighting the bureau's broad range of responsibilities. In this article, the Commission's current land acquisition goals and public use policies are discussed.



doubtedly will continue to increase in value.

Of the 75 tracts purchased in the past 2½ years, 32 were subsidized by the Lehigh Valley Conservancy. This non-profit conservation organization purchased 1897 acres in the Southeast for \$670,332 and sold them to the Commission for \$512,512. These acquisitions made it possible for the Game Commission to expand five existing Game Lands.

### New 428-Acre SGL

In January 1984, the Western Pennsylvania Conservancy continued its long history of acquiring tracts for conservation purposes when it purchased and then sold to the Game Commission a 428-acre tract in Washington and Greene counties. This acquisition became a new State Game Lands.

Another recent acquisition also deserves mention because it represents a new method by which the Game Commission is acquiring properties. In October 1984, a 170-acre wetland tract in McKean County was purchased with the intention of creating a new Game Lands. This was the first tract acquired with funds derived from the sales of Pennsylvania's waterfowl management stamps and prints. While this program is in only its fourth year, over 700 acres of wetland habitat already have been purchased through it. Wetlands are a rare habitat type throughout the nation. They are extremely valuable to wildlife. Wetlands sustain higher numbers of animals than other habitats, and many species thrive only in this special environment. With funds from waterfowl management stamps and prints, the Game Commission hopes to accelerate acquisition and management of Pennsylvania wetlands.

Another recent acquisition deserves mention because it's one of the largest in Game Commission history. In March 1984, the agency finally consummated purchase of a 16,672-acre tract in Blair County, adjacent to SGL 108. This tract was purchased from the Blair Gas and Water Company for \$170 per acre.



**TRAPPING, birdwatching, photography, hiking, dog training, nature study and horseback riding are among the activities other than hunting pursued by countless persons on SGLs.**

Negotiations for this tract had begun in 1962.

Over the years, the Game Commission has obtained several water company properties. Such companies find it beneficial to sell their lands to the Game Commission because they free themselves of the expense of protecting their watersheds and they can reinvest the profits to modernize distribution systems. Both of these advantages ultimately translate into savings for their customers. The Game Commission has an immaculate record of protecting watersheds, and will probably continue to make these kinds of acquisitions.

The Game Commission is often criticized for spending so much money and effort on land acquisition and development. These criticisms are hard to understand. Land purchases are sound investments—investments in the future. Where would the agency, today's hunters, and all outdoor enthusiasts



**THE COLD WINTER MONTHS** when most persons are indoors give snowmobilers the chance to do their thing on Game Lands trails.

be if it weren't for the foresight demonstrated by the Game Commission founders decades ago when policies were established and most State Game Lands were being purchased? Land acquisitions have proven to be invaluable resources and they undoubtedly will escalate in value. In years to come, wildlife and people are going to be excluded from more and more land. That's inevitable. Therefore, we feel obligated to continue an ambitious land acquisition program.

### **False Idea**

The idea that Game Lands reduce local tax bases is false. This potential inequity was recognized at the onset of the agency's land acquisition program. In 1929, a fee of 5¢ per acre, in lieu of taxes, was paid by the Game Commission. This fee was raised to 7½¢ in 1949, to 10¢ in 1956, 20¢ in 1963, 39¢ in 1980, and to 60¢ in 1984. These fees are now distributed in equal shares to counties, school districts and townships. In 1983, the latest year for which a total is available, the Game Commission paid \$759,855 in lieu of taxes.

It's often argued that private properties must be inordinately taxed to com-

pensate for untaxed Game Lands and other public lands. This argument has little merit. Assessment values of undeveloped state-owned properties are low, so taxes based on these assessments would be small, in some instances comparable to the in-lieu of tax payments. It should also be pointed out that because county, school and township taxes are used to provide public services—for school districts and road construction and maintenance, for instance—public lands pose minimal, if any, expenses to local governments. In addition, public lands can actually enhance the value of surrounding private properties, which benefits both the owners and local governments. And finally, users of public lands provide business revenues which greatly offset any theoretical tax losses.

State Game Lands are managed for wildlife and to provide outdoor recreation opportunities. Wildlife is managed by creating and maintaining the optimum variety of habitats, so precise food and cover needs of all species are being accommodated. How that is done will be covered in a future article.

Outdoor recreation is encouraged on State Game Lands. Enthusiasts are free



to pursue many outdoor activities. The few restrictions that exist have been enacted to prevent or minimize detrimental effects to wildlife.

Recreation-related management practices are also intended to minimize human disturbances. Game Lands are maintained in as natural a condition as possible. With few exceptions, there are no buildings on Game Lands. There are few roads, and most of those that exist are normally closed to motorized traffic. As a rule, park-like picnic areas are not found on State Game Lands. Overnight camping is prohibited except for the provisions made to accommodate backpackers on the Appalachian Trail.

Several areas are classified as Propagation Area and are closed to the public. These areas account for only 3000 of the Commission's nearly 1.3 million acres, and most have been established so waterfowl can nest and rear their young without human disturbance. Areas where bald eagles nest on public property, and where eagles are raised and released, are classified as Propagation

Areas for the same reason.

Outdoor enthusiasts must enjoy the undeveloped nature of these tracts, because State Game Lands are heavily used. Hunting is the most popular activity on them, but by no means the only one. According to a user survey conducted several years ago, hunting accounted for 35 percent of Game Lands activity. Hiking, photography, nature study, bird watching, dog training, snowmobiling, trapping, fishing, horseback riding, cross-country skiing and bicycling are some of the other popular activities enjoyed, without cost, by residents and visitors of the state.

State Game Lands are priceless assets. As long as they exist, wildlife will have places to live, hunters will be able to enjoy their sport, and everybody will have places to experience and study nature. With land continually being converted and closed, these needs will become increasingly difficult to find in the coming years. To reiterate, State Game Lands are investments in the future.

# GAME NEWS

Enclosed find check or money order for \$\_\_\_\_\_ for my subscription to Pennsylvania GAME NEWS. **Remittance must accompany order.**

☐ NEW    ☐ RENEWAL    \_\_\_\_\_  
ACCOUNT NUMBER

*(Check One)*

**In U.S.**    ☐ 3 Years \$16.50    ☐ 1 Year \$6.00

**To Canada and all foreign countries**  
☐ \$7.00 per year in U.S. Currency

Name \_\_\_\_\_  
*(print plainly)*

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_  
*(Zip Code)*

NOTE: All remittances should be made payable to the

PENNSYLVANIA GAME COMMISSION

Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567

**DO NOT SEND CASH**

**Please allow 60 days for first copy.**

# My Walking Stick

By K. D. Pritts

**M**Y FIRST and only walking stick came from a small chestnut tree. It was not the common Chinese variety, but a full-fledged American chestnut. For those of you who don't remember, a devastating chestnut blight swept across North America earlier this century and destroyed nearly every American chestnut tree in the United States. A few sprouts attempt to grow each year from old stumps, and one of these became my walking stick. Now you might wonder why I would cut down such a rare tree. I didn't. This small chestnut had been felled in a storm and its trunk was just the right size for a walking stick. I took it home, scraped off the bark and shellacked it, and my walking stick was ready for business.

That was ten years ago, and my walking stick is still with me. It has accompanied me on numerous scouting trips for deer, grouse, squirrels and rabbits, and I dare say it has seen more game than my shotgun or rifle ever will. My trusted companion has saved me from falls, helped me up steep mountains, and has even served as a rest for my camera.

The old stick is rather battered now, but the scars bring back a flood of memories—a grouse and her chicks on an early morning stroll, a spike buck engaged in a ferocious battle with a sapling, the slap of a beaver's tail on a quiet pond. Each blemish has a special meaning, yet one small mark near the base of the stick brings back the most vivid recollection of all.

I'm not much for staying on trails

while scouting, so often I find myself in rather wild and isolated country. Such was the case one summer day when a jumble of boulders blocked my path. The rock ledge extended as far as my eyes could see. Instead of trying to go around, I decided to traverse the boulders. As I scrambled over the rocks I was confronted by several wide crevices. One appeared shallow enough to cross, and I stuck my walking stick into it for balance. When I did, I felt a slight vibration in the staff. It reminded me of the "tap-tap" of a fish taking a worm. I moved the stick a few inches and was greeted by the spine-tingling buzz of a timber rattler.

Some people describe the sound of a rattlesnake as a hum, a rattle, or even a bell, but I distinctly remember a buzz. I immediately abandoned my walking stick and made a hurried retreat to the top of a large boulder. I imagine I looked very much like a cartoon of a person, scared by a mouse, standing on a kitchen table and looking intently at the floor.

After a few minutes I was feeling rather foolish because the buzzing had stopped and I had not actually seen what caused it. The forest was full of natural sounds—birds singing, leaves fluttering in the breeze, the hum of insects—but the sound I was listening for was not repeated.

## Back to Stick

I hesitantly made my way back to my walking stick and moved it around cautiously. Nothing. I moved it around more strenuously. Nothing. I began to wonder if I had imagined the entire incident. As the moments passed I became bolder and decided to continue on my way. I pulled my walking stick from the crevice and jumped across. As I did so I caught a glimpse of a small drop of clear liquid trickling down the stick. Before I could take a closer look it dropped off and disappeared on the forest floor. Perhaps my eyes were playing tricks on me; perhaps it was just dew from a shaded crevice; or perhaps my walking stick had saved my life.





# The Ultimate Sportsman

By Richard W. Tomlinson

NOVEMBER 20, 1983, was a typical Sunday before the opening day of bear season in Pennsylvania—raining and getting wetter. I was packing my hunting gear and heading for central Pennsylvania to meet my brother Ron for our annual bear hunt. This year it would be only Ron and me hunting black bear. Usually we would have a party of five or six (my two other brothers Herb and Leo, brother-in-law Marty, and friend Bern), but for various reasons only Ron and I would make the hunt this year.

Before leaving home, my youngest daughter Brenda and wife Jeanie wished me good luck. As I was about to leave, Brenda handed me her lucky four-leaf clover, "Here, Daddy, this will bring you luck." Little did I know how much luck it would bring.

On my way north I stopped at my brother Jim's house, as usual, for a good hot meal that his wife Francie made. I was to meet Ron on the mountain Sunday night, and we would set up camp in our vehicles as we had done many times before. It was still raining. It rains almost every year in bear season; this year appeared no different.

That night, as we lay in the car listening to the raindrops hitting the roof, we talked about previous hunting trips: about the bear I missed in 1974, the 350-pounder Herb got in 1975, and the work it took to get that one out. We talked about the ones Ron had seen but was unable to get a clean shot at, and the one Ron saw right behind another hunter and so could not shoot. When he asked the hunter if he had seen any bear, the hunter replied, "No." Ron



**I GOT A glimpse of black satin in thick laurel — a bear. I quickly scanned the area again to find an opening. Within seconds the bear appeared.**

then showed him the bear tracks in the snow not more than 40 feet behind him. We also talked about the previous year's hunting trip. Like most of our bear hunting adventures, we came back soaking wet and empty-handed. As the night grew on, Ron fell asleep but I lay awake, as usual on the first night in camp.

About 3 a.m. the rain stopped. Before I knew it, it was 4 o'clock and time to get up. The clouds broke and a full moon came out. We made breakfast on the tailgate of my truck. Bacon, eggs, and coffee from the old cook stove sure did smell good.

We usually would be on top of the mountain before first light, but today decided to wait until just about day-break. We started up about 6:30. Ron found an area he wanted to hunt, so we wished each other good luck and I climbed until I was within 100 yards of the top.

The day was beautiful. No wind or

rain, and the sun was shining. It was now about 8 o'clock, and suddenly I heard a noise above me. I scanned the area but did not see anything. I could hear hunters driving down the hollow. About five minutes passed. Suddenly I saw movement in the direction of the noise I had heard earlier. There stood a buck, a nice 8-point.

I watched the buck feed for about 20 minutes. I could hear the other hunters getting closer. At this time the drive was only about 75 yards away, but I could not see them because of the heavy laurel and trees. Suddenly, I got a glimpse of black satin in the thick laurel — a bear. I quickly scanned the area again to find an opening. Within seconds the bear came into the small opening. When I brought him in with the scope on my Remington 760, he was broadside. I squeezed the first shot off as he was turning, and my 30-06 bullet caught him behind the left shoulder. He headed uphill, then turned broadside again. I pumped another bullet into his shoulder. Now the bear was about 50 yards away and angling downhill toward me. I knew my first two shots were solid hits. I remembered someone telling me to keep shooting until a big game animal like a bear stops, so I fired two more shots. All four shots were probably fired within six or eight seconds. Later, I found that all had hit their mark.

#### **The Fourth Shot**

At the fourth shot the bear rolled down the mountain, rocks bouncing and sliding with him. They made a sound I will never forget. The bear stopped about 35 yards from me in some small pine and laurel. After a second or two I started toward the bear, then stopped abruptly. I realized I had only one cartridge left in my rifle. Taking no chances, I replaced the empty clip with a new one. After making sure the bear was dead, I let out a war cry, calling for Ron. Mr. Bruin was mine!

I looked down the mountain and saw a hunter coming toward me, but it was



not Ron. I hadn't known there was another hunter between Ron and me. And that is the reason for the title of this story.

As the stranger approached me and my bear, so did two hunters from the drive that had passed. They acknowledged me and the bear, and continued on with their drive. One turned and asked what caliber of rifle I was using. I told him an '06, and he nodded and went on. By this time Ron and the stranger were there. They congratulated me, and we examined the bear. We estimated its weight 450 to 500 pounds. As we field dressed the bear we talked, and I learned that the stranger's name was Gerald Keeny. He was from Wintertown, in York County.

After we had finished working on the bear, Ron headed down the mountain with my rifle and heavy jacket, hoping he could get some help. We had a long day ahead of us, because the drag would be almost a mile. Gerald Keeny volunteered to help, and I was really grateful, because Ron came back empty-handed. There were a lot of hunters on the mountain that day, but only one volunteer, Gerald.

As time went on we got to know one

another. At one point, Gerald said, he'd had the bear in his scope. Had I not stopped it when I did, he was about to fire. Gerald was from a camp down the mountain, and had hunted deer and bear there for years.

I'd killed my bear at about 8:25. The three of us dragged it until 2 p.m., when we received some help from several men in Gerald's camp, two Game Commission officers, and other hunters. At times we had six men pulling at once. We finally got the bear out at 4 o'clock that afternoon. By that time I was convinced that bear weighed 1000 pounds.

If the Pennsylvania Game Commission gave an award for Sportsman of the Year, I would nominate Gerald Keeny. For a total stranger to give up a whole day of hunting time to help another person is the ultimate in sportsmanship. My brother Ron and I will be forever grateful to Gerald Keeny. I hope I am on that mountain when Gerald gets his black bear.

By the way, my bear field-dressed 436 pounds and its skull scored 20 $\frac{7}{16}$ —and Brenda's four-leaf clover will be carried by Uncle Ron this season.

---

**REGIONAL OFFICIALS** of Ducks Unlimited and the Game Commission recently signed an understanding of agreement for the MARSH (Matching Aid to Restore States Habitat) program. Through the agreement, the Game Commission is eligible to receive over \$51,000 from DU National in 1985 to enhance its waterfowl conservation program. The Commission must add almost \$26,000 as its part of the agreement. DU officials, shown standing, are Dave Urban, Lynn Hofius and Ralph Bitely. Signing for the PGC are Commissioners Thomas Greenlee and Roy Wagner, flanking Executive Director Peter Duncan.



I DIDN'T realize at the time that it was the richest period of my life. All I knew was that I wanted a shotgun so much I could taste it, and the possibility of acquiring even a secondhand White Powder Wonder was as remote as buying the Taj Mahal. Ma barely had enough to put bread on the table and

kitchen table and the Glenwood range, two hot pancakes balanced precariously on the spatula. Then she hurriedly dumped them on my plate. "Rabbits? With your 22?"

I nodded vigorously as she returned to the stove and began pouring batter for another pair of flapjacks.

# The Golden Age

By Paul A. Matthews

an occasional box of 22s in my pocket, and the only reason she could afford them was because of their contribution to our sustenance. Every hunting season I looked with envy at the magnificent doubles I saw in the field—the L.C. Smiths, Lefevers, Ithacas, Fox Sterlingworths, Bakers and Parkers to name a few. Many were old damascus-barreled side-hammer models that had been handed down through generations, and were being used by hunters totally ignorant of the incompatibility between these early models and modern smokeless powder loads. All the while, however, I suffered through each season with my little 22.

As I look back over a span of fifty years to that golden era, I wonder at the blindness that confuses our thinking in some periods. I wonder if it might be better if man was born with the intelligence of an adult, an intelligence that deteriorates with age so that by the time of retirement a person's ready for life as it is in the golden era of youth. And I'm not so certain that this isn't exactly what has happened to some of us, because whoever heard of deliberately hunting rabbits, grouse and an occasional pheasant with a little single shot 22 Hornet, with ammunition specially loaded for the occasion? Squirrels, yes, they are definitely for the rifle. But other small game . . . ?

"I'm going after rabbits today," I said. Ma stopped midway between the

"I was counting on some squirrel for dinner tomorrow," she said.

"Won't rabbits do?"

"Yes." She hesitated, and then added, "If you get them."

"I'll get them."

She said no more about it until I was going out the door. She pressed a pair of cold bean sandwiches in my hand and said, "If you can't get the rabbits, two or three squirrels will do." And then she smiled as I stepped outside. I stopped only long enough to slide a 22 long into the chamber.

The old dirt road beside the house crept up the northern face of the Buckhorn. When it reached the top, it leveled out along the crest of the mountain while the land sloped away on the left for six or eight hundred yards of reverting field covered with briars, scrub pine and a multitude of other brush. At the bottom edge of the field a wooded slope dropped abruptly into Mallory Run, a twisted gorge that separated the Buckhorn from Porcupine Peak.

As I briskly hiked the mile and a half to this overgrown field I imagined rabbit after rabbit bounding out from their hiding places only to fall a few jumps later from well placed slugs from my little Remington. If men could shoot them on the run with a shotgun, I thought, I could do the same with a 22. I'd just have to be a little bit faster and a bit more accurate. In my daydreams, this was no problem.

Reality, however, was a horse of a dif-





© 1984 Frank Fritze

FRANK  
FRITZE

ferent color. I hadn't thrashed through too much brush and kicked out too many rabbits before I realized I might as well be armed with a handful of marbles as with the 22. Every bunny I saw wasn't much more than a streak of brown smeared across a canvas of tangled briars, witch hazel intertwined with stumps and sedimentary boulders thrown in for good measure. At each streak I'd throw the little rifle to my shoulder, earing back the hammer as it went, and snap off a shot just as the last glimpse of cottontail twisted from view. And often, to make things really smart, I'd hear in the distance the double thud of a shotgun and know in my heart that what I was doing was futile.

Yet on previous hunts I had shot a rabbit or two with the rifle when I

**MY GAZE** peeled away the little patches of cover that might hide a rabbit. I studied the dark spots under the clumps of dead goldenrod and at the bases of scrub pines.



found them crouched along an old stump fence or in a warm nest in the sun. I'd even taken a grouse now and then while I sat waiting for gray squirrels and the birds came pecking their way along the ground. So it could be done. I just wasn't doing it right.

Noon came and the two bean sandwiches did little to fill the yawning chasm in my stomach. I wolfed them in a few snaps and then bellied down to the creek for a taste of Mallory Run. From somewhere in the depths of my mind, it occurred to me that I was hunting as though I were carrying a shotgun—I was deliberately trying to flush the game. That was my mistake.

### Brushlots of Mallory

I spent the afternoon in the brushlots on the northern slopes of Mallory Run. But instead of smashing through the cover at a pace of a hundred and forty young-boy steps per minute, I slowed to about ten or fifteen old-man shuffles per minute. It wasn't easy to take only a few steps and then stop and scrutinize every bit of cover. And when I came to a brushpile, instead of stomping on it, I merely pushed at it gently with a frazzled boot. On one of these occasions I jumped the afternoon's first rabbit.

He went out, not like the streaks of brown I'd seen in the morning, but rather in a hesitating short run that took him just out of sight. There was a difference, and I knew it. My kid brain recognized it, and my heart started to hammer. Slowly and cautiously I started making my way toward the last spot where I'd seen the rabbit. The little rifle was at high port, my thumb curled over the hammer spur and my fingers gripping the stock until the knuckles whitened.

Every step I took, my gaze peeled away the little patches of cover that might hide a rabbit. I studied the dark spots under clumps of dead goldenrod and the bases of scrub pine. My eyes scrutinized the gray-brown texture of a rotting log, looking for a rabbit form. When I got to where I'd last seen the rabbit, I stopped and studied every



detail within my circle of vision.  
Nothing. Cleaner than Mrs. Wiggs' cabbage patch.

For some reason I felt the rabbit had circled to the right, so I bore off in that direction, taking short, mincing steps with lots of time in between. I'd covered about forty or fifty feet, and was ready to call it quits and head for the squirrel woods, when I spotted him crouched low to the ground, ears laid back along his neck. He blended in almost perfectly against a dead oak limb that lay behind him.

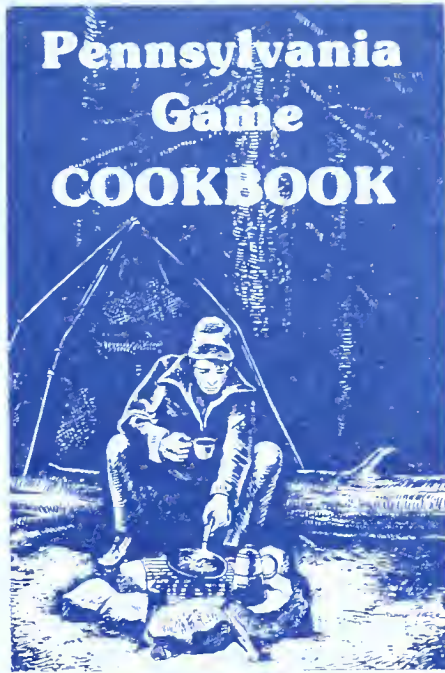
Oh, I didn't see the whole rabbit at first—no sir. What caught my attention was that shiny black marble-like eye. Next I noticed an off-color blotch of brown that didn't quite blend with the oak limb—and all at once the entire rabbit came into focus like a slide on the screen.

I don't recall how the little Rolling Block found its way to my shoulder. Maybe it was my brain screaming for action, maybe it was just a natural instinct born in all boys. Whatever, the rifle was there and the sights fell into line with that marble eye and I pressed the trigger. I had done it! And I did it once more that same afternoon.

### Golden Age

Ah, yes, that was the golden age of life. But at that time, I didn't recognize it. And later, when my mother found an old field-grade Lefever double for the princely sum of seven dollars, I was in true ecstasy. Many nights I trudged home with my game pocket bulging and my shoulders aching from the weight. Success was measured by the percentage of the limit, and at last I considered myself one of the "big boys."

I used that old double for 40 years. But time has a way of eroding the soft spots, and as the years slipped by, the enthusiasm of filling the game pocket grew dim. Evenings by the fireplace



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by **GAME NEWS** readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from **GAME NEWS** office.

brought back recollections that had lain dormant for years, and somehow I came to realize what the sport of hunting was all about. I cleaned the old Lefever and retired it, and the next time I went for rabbits, I carried a little 22 Hornet with loads tamed down especially for the occasion.

You know, the boy in us never dies. It stays with us all our lives—sleeping in a dark closet in the depths of our memory, just waiting for someone to open the door and pick up the little rifle and go rabbit hunting.

# Wildlife In School...?

By Dean Fromm

**A** FEW YEARS ago John Smarsh, then the high school principal, now the district superintendent, and I introduced a new course into the science department at Littlestown High School. It was an elective for juniors and seniors. We called it "Wildlife and Natural Resources." It began as a half-year offering and was worth a half-credit. Over the years we packed more and more into the few months until it is now a full year course worth a full credit. We meet for one period a day, five days a week. Since many schools do not have such a course, I thought it might be interesting to describe ours to you. Let us skim through a typical year.

We begin the school year by studying the wildlife history of Pennsylvania, the abuses and the attempts at controlling birds and animals, and the general destruction of habitat by early settlers. We spend several weeks on ecological communities, concentrating on the pond, marsh, field, and forest areas. We discuss food webs, the characteristics of wildlife, current laws, the advances in wildlife management in Pennsylvania, population dynamics, and the effects of hunting and trapping on wildlife.

As we cover these topics, excellent

educational films from the Pennsylvania Game Commission are shown and discussed. The class will travel to the Middle Creek Wildlife Management Area for a tour of the museum and a lecture by the resident personnel, and then walk the nature trails for additional study. We will spend another day at the Pennsylvania Fish Commission's fish culture station at Huntsdale. After an hour lecture by the hatchery foreman, explaining the operation of the hatchery, what type of fish are grown, and seeing living examples of the fish in the indoor aquariums, we will see a demonstration on the spawning techniques. Selected ripe females will be anesthetized and the eggs gently removed, the milt from the male will be introduced to the eggs, and after fertilization the eggs will be washed and placed into a hatching battery. Then a tour of the grounds to see all of the many fish at various stages of growth and the methods of feeding and handling.

These field trips are fun. But learning is the intent and purpose, so a test is given after all trips to see if the students have gotten out of them what was intended.

The Pennsylvania Game Commission

**EUGENE VOGELSANG, left, displays his skull collection and the hat and gloves he made from opossum skins he tanned, while Chris Reaver, right, poses with her deer-foot lamp.**





has more than three dozen Wildlife Notes on specific birds and animals. We use them all, one each week. This is our in-depth animal study for the week. The pamphlets are discussed, Game Commission films on the animal viewed, questions are answered, and a test is given.

Before the end of the first semester we will have presented the Hunter Education course. We use all of the films, slides, handouts, and other materials available before going outside for a firearm and safety demonstration. A program to illustrate the difference in arms, ammunition, and techniques will be presented. The pattern of a shotgun shell, the differences between various types of bullets and their relative impacts on targets will be seen and explained.

Finally, those who pass the written test will get a grade for the class as well as the card and patch from the Pennsylvania Game Commission as having successfully completed the course. The Hunter Education course, as we give it, takes about thirty hours. We use every resource available.

### Training Program

The Pennsylvania Game Commission also has an excellent Trapper Training program, and we make use of this also. Again we use every resource available — films, slide lectures, furs, and pamphlets indoors, then outside to practice making sets. When all of this is finished, the test. For those who pass, there is a card and a nice patch.

During the winter months we spend eight weeks working on individual projects in taxidermy, tanning skins, mounting skeletons and mounting antlers. One ambitious student tanned some skins and made several garments from them. We also spend some time on bird identification.

In the spring we prepare for our four-day field trip to the Marine Science Center at Wallop's Island, Virginia. Here we cruise on an oceanographic research vessel, studying instrumentation, sampling devices, navigation, and col-



**BILL COOL and Duane Chrismer mount some nice deer racks on walnut plaques for permanent display. This is a comparatively inexpensive way to keep and show trophies of the hunt.**

lecting techniques. More time is spent on shore studying the maritime forest and its animals, the salt marsh, the intertidal zones, and the beaches. Again, we don't forget the test.

Much of this sounds like fun, and it is. But there is also a lot of hard work. We take all aspects of wildlife very seriously. After all of the work, all of the studying, all of the field trips and all of the tests, there is at last The Final Exam.

I feel that at a time in our history when more and more of our environment is being taken away from wildlife due to urbanization, mechanization, and transportation, the more we teach our young people about the needs, value, and benefits of wildlife, the better off we all will be. This course and others like it are one small step in improving the wildlife situation for the future.

**You've got a friend  
in Pennsylvania**

# *Nature's Explosive Violence!*

**By Thad Bukowski**

ON MAY 31, 1985, nature proved once again how devastating it can be. In a few terrible hours, large swaths of land, mostly in the northwestern part of Pennsylvania plus areas in Ohio and New York, were torn by winds of up to 300 miles per hour. Almost a hundred persons were killed, 65 of them in Pennsylvania. Hundreds more were injured, and many millions of dollars in property damage occurred. It was a catastrophe that never will be forgotten by anyone who lived through it.

The disaster occurred when three huge air masses collided above the Ohio-Pennsylvania border, spawning 21 twisters which caused the greatest tornado damage ever in the United States. The violence roared eastward through four Ohio and 16 Pennsylvania counties and reached as far north as Barrie, Ontario. Of the 21 tornadoes that occurred on that fateful night, eight touched down in Ohio and most of the remaining ones spread havoc on Pennsylvania.

A week after the violent winds subsided, assessed damage included at least 91 dead, 707 injured, and 1,602 homes destroyed. The National Weather Service confirmed that tornadoes impacted on more than 12,000 square miles of Pennsylvania alone.

Pennsylvania counties in which deaths were recorded included Erie, Crawford, Forest, Venango, Mercer, Butler, Beaver, McKean, Northumberland, Union, and Lycoming.

President Ronald Reagan declared four Ohio counties and over a dozen in western Pennsylvania major disaster areas. Greatest property damage was listed in Forest County, where hundreds of recreation cabins were destroyed in a 20-mile twister swath which steamrolled through the Allegheny National Forest.

Disaster counties listed in Ohio were Ashtabula near Lake Erie, Columbiana and Trumbull in the northeast, and Licking County in east central Ohio. Fifteen people died in Trumbull county in the Youngstown perimeter, with major damage at Newton Falls and Niles where complete blocks of homes and business sections were leveled.

In western Pennsylvania, communities leveled included Albion-Cranesville, Wheatland, Atlantic, Whig Hill, and Cherry Tree. Major or substantial damage also occurred at Hermitage-West Middlesex, Cooperstown, Dempseytown, Linesville, Woodcock Reservoir, Conneaut Lake Park, Jamestown, Evans City, Mars, Beaver, North Sewickley, Tidioute, Tionesta, Kane, Marienville, Mt. Jewett, Hazelhurst, and Corry.

Five communities in a 24-mile path were smashed in the Barrie and Grand Valley, Ontario, areas in Canada, and troops set up emergency centers for hundreds left homeless. Twelve were killed and about 20 critically injured, with total injuries listed over 200.

Both Governor Richard Thornburgh and Lieutenant Governor William Scranton III visited the ravaged areas the next day, with the governor viewing sections of Wheatland and Albion-





**THIS SCENE OF destruction, just north of Tionesta and looking toward German Hill, shows the path of the tornado which swooped eastward off Route 62 and continued for 23 miles.**

Cranesville, while Lieutenant Governor Scranton surveyed the devastation in the Franklin, Cooperstown and Cherry Tree areas. Vice-president George Bush also toured Wheatland a day later and quickly confirmed disaster help needs on a national scale.

John Patten, chief of the Pennsylvania Emergency Management Agency, said that of the 400 tornadoes which have hit the state since 1854, this was by far the most destructive. Utilities were so devastated that for over a week many regional residents had to boil their drinking and cooking water, and half of one power company's customers of 125,000 were without electricity for much of the week that followed because so many poles and lines were down.

Entire towns and trailer courts were destroyed. In Atlantic, which is southeast of Hartstown and Pymatuning Dam, 100 buildings or mobile homes were destroyed or damaged with only seven left standing. The many Amish who live in the area had no insurance. The town may never be rebuilt. Centerville, Linesville and Cochranon in this Crawford County area were also hard hit.

In Mercer County alone, damage estimates were in excess of \$100 million,

with structural damages to houses listed over \$8 million, not including personal property. Damages to autos from accompanying hail in this county reached more than \$1 million, and damages to farms were listed at \$1.2 million.

Over 100 homes were lost and another 100 damaged in the Albion-Cranesville area of Erie County. All trailers in the Kennedy Trailer Park in Cranestown were smashed. Damage estimate in this area was over \$13 million.

Winds exceeding 150 mph leveled eight to 10 blocks of Albion and two trailer parks. Almost every home on both sides of Albion's main street was destroyed.

### Outboard from Sky

Winds were so strong in some areas — over 200 mph — that Jim Ticknor saw a large outboard motor fall from the sky and land six feet away from him.

Twelve people were killed in the Albion-Cranesville area and over 150 injured.

In Beaver County, none of 14 stores in the Big Beaver Plaza survived the storm. More than 100 cars in the parking lot were damaged or destroyed.

Governor Thornburgh, after survey-

ing the devastation by helicopter, said, "You can't begin to describe a disaster like this."

Officials said 189 buildings were damaged in Erie County, 102 in Mercer, 72 in Butler, 25 to 50 in McKean, and 150 in Beaver, in addition to the hundreds of camps in the Allegheny National Forest.

Many people escaped death or serious injury by taking refuge in basements or various depressions in the ground.

### **Began Near Border**

The huge twister mass that caused the devastating damage began between Cleveland and Youngstown, Ohio, near Pennsylvania's western border, when warm moist air from the Gulf of Mexico collided with a cold front from the west and was also "sucked up" by a 125-mph jet stream at 30,000 feet to form a huge chimney effect. The sucked air climbed to 50,000 feet, further intensifying the crackling electric storm.

The storm situation seemed to explode. Dick Sedlack, meteorological technician at the National Weather Service at Youngstown Municipal Airport, reported that in 30 years in the business he never saw anything develop so quickly. "It was an explosion," he summarized.

The tornado began as an Oklahoma type in Ohio, and quickly headed for western Pennsylvania.

The first tornado touchdowns were recorded near Youngstown, Ohio, with three following in Ashtabula County near Erie, Pa. One of these is believed to be the twister that later leveled Albion-Cranesville, Pa.

Just after 6 p.m., golf ball-size hail hit Summit County, believed to be the start of the killer tornado that leveled Newton Falls, Ohio.

As the tornadoes devastated everything in their paths, Youngstown's weather service communication lines were severed. Stations WKBN, Youngstown, and nearby WPIC, Sharon, Pa., could not be called for immediate tornado warnings. There was no backup system. The Cleveland Weather Service

now was a more distant communications link. Both radio stations did yeoman service afterwards, with WKBN continuously broadcasting emergency phone calls and trying to reach folks by way of the station. Ham operators also helped.

The Newton Falls tornado cut a 41-mile swath through Lordstown, Weathersfield Township, Niles, Liberty, Hubbard and Wheatland, across the Pennsylvania line.

A tornado warning for Mercer County was issued by the Pittsburgh National Weather Service office as the Newton Falls tornado crossed the state line. The power packed storm continued northeastward through Wheatland, destroying over 95 per cent of its industries, Hermitage, West Middlesex, Atlantic, Cooperstown, Cherry Tree, Pleasantville, Tionesta, Tidioute and Kellettsville. It cut a huge swath through the Allegheny National Forest in a 20-mile path of devastation to Marienville, and ended near the high school at Kane, with downdrops also at Mt. Jewett and Hazelhurst.

The Newton Falls tornado was the most violent, attaining the maximum F-5 rating on the intensity scale, with winds reaching an incredible 300 mph. Eight of the other tornadoes were F-4 levels, with winds up to 250 mph.

The Tionesta tornado was part of an intense system which barreled across Venango, Forest, Warren and McKean counties, among others, with wind velocity reported up to 250 miles per hour. Slashing from west to northeast, it swept both hillsides and a big island of the Allegheny River just one mile north of Tionesta and literally splattered camps and cottages in its path. Moving over the hill, it shattered German Hill and Starr, then headed slightly northeast, knocking out much of Kellettsville, skipping up and down through the forest until it dissipated near the Kane High School, leaving destruction of unbelievable proportions in its path. In Crawford County near the Pymatuning it also wiped out Atlantic, a rural community with many





**LT. GOV. WILLIAM SCRANTON** talks with homeowner who salvaged a few items after vicious storm.



**ALL THAT** remains of a summer residence along Tubbs Run Road, Forest County.

All Photos by Thad Bukowski



**THIS WAS A** dairy farm barn and home. Only three cows of a large herd survived when barn roof collapsed.



**STRANGE** debris—a sofa cushion impaled on broken tree in ANF.

**SMALL SPORTS** shop south of West Hickory, not far from new West Forest Co. Junior-Senior High School.

**RESIDENTS** and volunteers help salvage items from shambles of a mobile home village at Cherry Tree.







**LARRY CORLL**, Tionesta volunteer fireman, points to TV set deposited along Tubbs Run Road. It isn't known where the set was blown from.



**THE Al Carbaughs, Robert McElhany and Christina Ball** search through the rubble of their mobile homes just west of Oil Creek State Park and south of Titusville.

Amish, and in Venango County it demolished a mobile home court just one hill west of Oil Creek State Park, leaving only one wall standing in the entire spot.

The tornado destroyed nearly 425 seasonal camps and cabins in the German Hill area alone, 44 in the Jamison Run area, and 132 in Kellettville. This did not include permanent homes. A second tornado which began farther north at Tidioute, also headed eastward, injuring 14 and destroying a number of residences and a restaurant.

Allegheny National Forest personnel who flew over the devastated areas estimate 49 million board feet of sawtimber valued over \$13 million on 13,700 acres of the 467,000-acre forest, was destroyed. Aerial surveys show an incredible loss of timberlands, with twisted and piled up treetops providing an almost impassible barrier to on-the-ground surveys. Cleanup costs are estimated at \$1.6 million.

Jack Lavery, Director of the Game Commission's Northwest Region, reported that considerable timber damage also occurred on nearby State Game Lands 197 and 101 and in Venango County. He reported that an evaluation of wildlife damage would take some time.

Devastation in the Allegheny National included:

Eight to 10 percent of the 9,337 acre Hickory Creek Wilderness Area, mostly in the central portion;

A half-mile-wide swath west of Kane;

About one-third of the Tionesta Scenic Area totally destroyed, with most of the damage near the northern border.

Much damage in the valley near the East Branch of Tionesta Creek.

German Hill, Starr and Kellettville;

Along 23 miles of the Forest's southern boundary and up to Blue Jay Road in Forest County—about 3,500 acres extensively damaged;

In Elk County, 1,000 devastated acres and 3,600 acres affected;

About 12 miles of hiking and motorcycle trails damaged or covered with debris;

Damage at Abraxas, near Marienville;

A portion of forest road 119, and some spots in the Tidioute area.

Though the natural destruction was far less tragic than the human deaths, it will nevertheless affect many outdoorsmen during the deer, bear, grouse, squirrel and turkey seasons. Favorite hunting areas have been obliterated, and this can cause confusion for the hunter who has not visited the region. Alternate areas might have to be found, and pre-season scouting is definitely recommended.



# young artists page

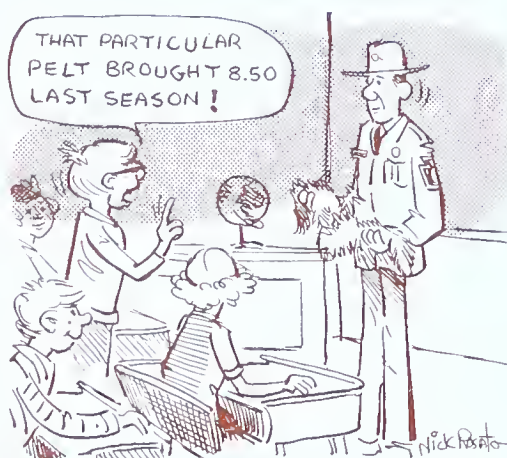
**Doe Deer**  
**Virginia Lenahan**  
**Mountaintop, Pa.**  
**Crestwood High School**  
**11th Grade**



**Squirrel**  
**Shane Trostle**  
**Mohnton, Pa.**  
**Twin Valley High School**  
**9th Grade**

## And Comradeship

**VENANGO COUNTY**—Following the tornadoes that caused so much destruction in June, it was good to see so many people turn out to help with rescue, repair, cleanup, and victim relief. It was especially nice to notice that many of those volunteering help were sportsmen I have met in the field. This is an excellent example of true sportsmanship! —DGP Len Hribar, Oil City.



## Always One Better

**POTTER COUNTY**—Kids are amazing! If you don't think so, just talk to them. While putting on field days for fifth-graders from Coudersport, I was talking about the pelts of the different animals. One young boy knew every pelt I held up. Furthermore, when I was talking about the prices of mink, I told them that the male brought more money than the female. This little boy said, "Yeah, a male brought \$27 and a female \$17 last season." This youngster left me wondering who should be doing the teaching. —DGP Ron Clouser, Galeton.

## And A Fine SPORT

**CLARION COUNTY**—On the opening day of the past antlered deer season, Scott Means was hunting within sight of Route 854. At approximately 3:30, he saw several deer near his stand, but none had antlers. As several deer ran toward the road, Scott noticed a van stop along the highway, a side door open, and then a man get out and shoot. The van left immediately, with a doe lying unretrieved near the roadway. A second car quickly arrived and a man got out and looked at the doe. Scott told him what happened and the man said he would contact a Game Commission officer he knew. Later in the day, Scott also informed a Game Commission officer of this violation and offered to help in the prosecution of these individuals. As it turned out, Scott's information was clear and concise. He provided accurate and detailed descriptions of the individuals and vehicle involved; he appeared in the magistrate's court twice and Clarion County court once as the primary witness for the commonwealth. Because of his testimony, three persons were convicted of major Game Law violations. Scott is a 17-year-old high school student and a credit to the hunting community. —DEP Gordon Couillard, Clarion.

## Color Variations

**FOREST COUNTY**—I know quite a few piebald or albino deer have been taken in each hunting season since I've been here. This year, so far, I've learned of at least five mottled or totally white deer being seen along our forest roads. —DGP Al Pedder, Marienville.



## Movin' In

**BRADFORD COUNTY**—For the first time in this district I had turkey hunters report seeing hens with young. Three different hunters, all in different areas, saw new hatches. —DGP A. Dean Rockwell, Sayre.

## You Bet

**CAMERON COUNTY**—A couple of years ago I wrote a Field Note about Paul Roland, the Elizabethtown resident who has built and maintained several dozen bluebird nesting boxes on the Quehanna Wilderness Area. This past spring Mr. Roland stopped with some disturbing news. About the first of April, unknown culprits made off with all 12 of his boxes along Three Runs Road. I wonder if the vandals who were responsible would still have committed their selfish act had they known that it wasn't the Game Commission or the Bureau of Forestry who placed those nesting devices there, but instead, a senior citizen who has suffered a heart attack. Paul plans to replace the boxes as finances and health permits. Aren't nature lovers lucky that we have people like Paul Roland? —DGP Joe Carlos, Driftwood.

## 3-Prong Approach

We completed a project this past April in which a state agency, a utility company, and a sportsmen's group cooperatively worked to help wildlife. With assistance from the Wild Turkey Federation and their vice-president Howard Meyers, and West Penn Power Company and their forester Peter Spangler, 6,500 Game Commission seedlings were planted along a powerline on SGL 238 in Fayette County. These seedlings will provide food and cover for a variety of wildlife species for years to come. People came from as far as Crawford and Bedford counties to plant these seedlings, and their assistance and interest are greatly appreciated. —LMO R. B. Belding, Waynesburg.



## He's Not Mine!

**LUZERNE COUNTY**—This month's Bleep, Bloop and Blunder Award goes to the police officer who volunteered to the county communications operator: "I know where Nolfie lives. I'll get him up." He did, at 2 o'clock in the morning, to report a bear eating garbage in Weatherly Borough, *Carbon County*! —DGP Robert W. Nolf, Conyngham.

## On The Road Again

After an evening of woodchuck hunting, Waterways Patrolman Ray Hoffman struck up a conversation with an elderly hunter on the parking lot at SGL 227. As they talked, a gray fox approached to within about 20 feet and curled into a comfortable position. Ray put his rifle on the back seat, then opened the front door to put his binoculars on the front seat. Glancing back, he was surprised to see the fox curled up in the back of his car. With the thought of rabies on his mind, Ray wondered how to remove the fox. Then he remembered the two speakers mounted in the back of the vehicle. So, he cranked the volume all the way up and slapped a Willie Nelson tape into the player. The first ear-splitting note turned the fox into a gray streak heading for parts unknown. Just think what the reaction would have been had he used rock music. —LMO S. L. Opet, Tamaqua.

## Jumping In

**LANCASTER COUNTY**—I recently accompanied Larry Keller and Donald Metzger of the Lancaster Chapter of Waterfowl U.S.A. as they looked for places to plant waterfowl food along the Susquehanna. This group raises money to help waterfowl habitat, much like Ducks Unlimited, except their money stays in the area of the local chapter. D.U. does most of its work in Canada, where most of North America's ducks are hatched. Larry and Dan told me they spend several thousand dollars to buy natural foods to plant for ducks and geese, and to place nesting devices here. It is refreshing to work with organizations such as Waterfowl U.S.A. and D.U., who, instead of asking what state and federal agencies are doing for them, are asking what they can do to help the state and federal agencies. — DGP John A. Shutter, Jr. Lancaster.



## Only One Way To Go

**ADAMS COUNTY**—A large raccoon recently spent the night in a local laundromat. The next morning the owner called me and the local police, asking that it be removed as soon as possible. The police took care of the problem. While doing so they noticed that, even though the raccoon had spent the night in the laundromat, it still had “ring around the tail.” Sorry, but that’s the best I can do. — DGP Larry Haynes, Gettysburg.

## Only For Him, Though

**YORK COUNTY**—A concerned mother recently called me about her son, who had picked up a fox pup. He brought it home and attempted to feed it, and then got concerned about rabies. They took the fox to the laboratory for testing and, for some reason, the tests were not conclusive. This meant the boy had to go through the series of rabies shots. This was a hard way to learn to leave young animals where they belong—in the wild. I believe a \$500 lesson should last a lifetime. — DGP Robert L. Yeakel, Red Lion.

## Think Some More

**McKEAN COUNTY**—If you’ve been a Pennsylvania resident and hunted every season possible from 1960 to the present — meaning you have purchased a resident adult license, along with an antlerless deer license, muzzleloader license and bear license every year they were offered—you have spent a grand total of \$327.00 on licenses. That amounts to an average of only \$13.08 a year. Think about it. Just from a game protector’s view—not considering the land management, wildlife research and other aspects—it amazes me how so much has been done by Commission personnel for so little. Countless times game protectors have put their lives on the line to protect our wildlife. Some have even been shot. I just can’t believe some hunters feel they haven’t been getting their money’s worth. Think about it. — DGP John Dzemyan, Smethport.

## Good Signs

Last May my Food and Cover employees in both Potter and Tioga counties frequently observed grouse and turkey broods. These sightings, along with those of squirrels, rabbits, fawns and bears, suggest a better than average hunting season is coming up. — LMO Dave Brown, Westfield.





## Suburban Pitfalls

**MONTGOMERY COUNTY**—Being a conservation officer in a suburban area does have its amusing moments. Last spring I received a call about a hen mallard and her brood taking up residence in a swimming pool at a nearby condominium complex. Work needed to be done in the pool, so the ducks had to go. I donned hipboots, waded into the pool and scooped up the ducklings with a large net, while mama quacked impatiently at poolside. All was going well until the ducklings started to dive under the water and head for the deep end of the pool. Pretty soon the water was over by boots. After about an hour, and many futile attempts, all the ducklings were caught and reunited with their mother in a nearby stream. I really hadn't intended on taking a swim that day. —DGP D. M. Killough, Perkiomenville.

## No Justice

**CAMBRIA COUNTY**—A 341-pound bear was killed here recently for damaging some beehives. The unfortunate thing about this incident is the fact that the owner was keeping bees only as a hobby, and he knew he would be reimbursed by the Game Commission for the damages. Many things we do in the outdoors, particularly in rural areas, end in conflict with wildlife, but all too often what is fun for us is fatal for them. —DGP Raymond A. Lizzio, Johnstown.

## It Is Here

**MONTGOMERY COUNTY**—Besides being a game protector here for the past ten years, I have been hunting and fishing in this county since 1962. In all, 23 years of my life have been spent here, enjoying the outdoors. Last week, for the first time, I had the pleasure of seeing a mature bald eagle here. It was perched in a dead tree overlooking a lake near the county line. I hope this is a sign that the Game Commission's bald eagle restoration project is paying off. —DGP William Wasserman, Montgomeryville.

## Both

**SCHUYLKILL COUNTY**—This past May I watched two swallows spend five minutes or so dropping and catching a feather in mid-air. It looked to me as if they were playing with it. Perhaps they were having a hard time getting the feather back to their nest. —DGP Lawrence A. Olsavsky.



## Contradictory

It's not uncommon to find bathers at the Moraine State Park beach having a good time feeding the Canada geese, and then, within 100 yards, finding people who are very unhappy because the geese have made it difficult to find a clean place to lie in the sun. Most frustrating, however, are those who blame the geese. —LM Jay D. Swigart, Butler.

## No Excuse

**ARMSTRONG COUNTY**—A few months ago Waterways Conservation Officer Jan Caveney and I served an arrest warrant on an individual who had failed to pay his fines on both Fish Law and Game Law violations — there also was an outstanding warrant out for him on a Dog Law violation. When we took the man into custody, he was, in possession of marijuana, and he later casually mentioned a number of bars where he does his drinking. He also told us that he poached deer only because he needed the meat to feed his family — an excuse that all too often evokes sympathy from citizens who don't know any better. Personally, I feel that all that money blown on bad habits could have been better spent on "feeding the family." — DGP Al Scott, Rural Valley.



## Double Barreled

**DAUPHIN COUNTY**—Some years ago my wife gave me an alarm clock that gives the choice of waking up to either the radio or the sound of a bird chirping. For the past few days I've been waking up in stereo. When the alarm goes off, a male cardinal flies into the tree outside the bedroom and sings back. — DGP Scott R. Bills, Millersburg.

## Pigeon Chases

**WESTMORELAND COUNTY**—While I was attending a law enforcement workshop, neighboring officer Rick Hixson received a call from a concerned citizen in my district about a large dead bird he had found. The bird was described as very large, with dark feathers with brown tips, a large beak, and it had leg bands on both legs. From the description, and with an increase in eagle sightings in Pennsylvania, Rick felt the bird might be an eagle. He immediately contacted Law Enforcement Supervisor Jack Sickenberger, and the two of them drove to the area and found the bird — a homing pigeon with two leg bands. During the same week, I received a call concerning a nestling red-tailed hawk that reportedly had fallen from the nest and injured itself. Upon investigation — you guessed it — another homing pigeon. — DGP R. Matthew Hough, Greensburg.

## Fancy Flier . . . Sometimes

**SOMERSET COUNTY**—A lady called me about an injured bird she had at her home. Upon picking it up, I identified it as an immature nighthawk. When I asked the lady where it came from, as I hadn't seen any in the area, she said her husband had found it in a manhole in Johnstown. I have known that nighthawks are outstanding acrobats, but this youngster must have tried an impossible trick. — DGP Daniel Jenkins, Somerset.

## Continuing Ed

**GREENE COUNTY**—Hunter education is really catching on with the general public. Approximately one-third of my classes consist of adult hunters-to-be and experienced hunters who are attending for various reasons. Many states require proof of attending a class prior to issuing a license, regardless of age or experience. The comments coming from these adults are all favorable and speak well of our corps of volunteer hunter education instructors. — DGP Robert P. Shaffer, Carmichaels.



# New License Fees

**F**EES FOR MOST licenses sold to finance many of Pennsylvania's wildlife management programs, along with the creation of eight new classes of licenses, will be in effect during the 1985-86 license year as a result of legislation, which we supported, enacted recently by the general assembly and approved by the governor.

For the 1985-86 license year, licenses for furtakers will be in place for the first time, senior residents will be able to purchase lifetime hunting licenses, there will be a new junior nonresident hunting license, and nonresidents will be able to purchase a small game hunting license good for a period of five days. The five-day nonresident small game license will include all small game species except turkey.

Except for increases in nonresident license fees in 1979 and 1980, license fees had not been raised in Pennsylvania since 1973. The new fees will enable the Game Commission to continue operations at present levels for another two years, when the Legislature probably will again be asked to increase fees.

The new furtaker licenses will be required for anyone 12 years of age or older who takes any furbearer. Furbearers which can be taken legally during the current license year include foxes, minks, muskrats, opossums, skunks, beavers and raccoons. The

legislation which increased license fees also reclassified the raccoon as a furbearer; previously, the raccoon had been a game animal. Those who *hunt* or trap furbearers will be required to have a furtaker's license. A hunting license will not be required to take furbearers in either case.

First-time furtakers will be required to successfully complete the Game Commission's furtaker education course before being eligible to purchase a furtaker's license. For those under the age of 12—who are not required to purchase a furtaker's license—completion of the furtaker education course is mandatory before they may legally *trap* furbearers. Those under the age of 12 are not permitted to *hunt* furbearers (or any other species of wildlife) under any circumstances.

The license year, as in the past, begins September 1 and ends August 31. Ages for junior licenses continue to be 12 through 16; for adult resident licenses, 17 through 64; and for resident senior licenses, 65 and older. No senior license is available for nonresidents—they are required to have regular adult nonresident licenses.

Fees for 1985-86 licenses follow:

LICENSE	FEE
Junior resident hunting	\$ 5.50
Adult resident hunting	\$12.50
Senior resident hunting	\$10.50
Senior resident lifetime hunting	\$50.50
Archery	\$ 5.50
Antlerless deer	\$ 5.50
Muzzleloader	\$ 5.50
Resident bear	\$10.00
Nonresident bear	\$25.00
Junior nonresident hunting	\$40.50
Adult nonresident hunting	\$80.50
5-day nonresident small game hunting	\$15.50
Junior resident furtaker	\$ 5.50
Adult resident furtaker	\$12.50
Senior resident furtaker	\$10.50
Junior nonresident furtaker	\$40.50
Adult nonresident furtaker	\$80.50



# Bear License Applications



**BILL FERRIER, of Shelocta, with his first bear, a 234-pounder taken in Jefferson County. Bill used a 7mm Remington Magnum to collect his fine trophy.**

**N**EW applications for this season's 100,000 bear licenses are now available to 1985-86 hunting license holders, upon request, from hunting license agents, Pennsylvania Game Commission regional offices, and the PGC's Harrisburg headquarters at 8000 Derry Street. Applications may be mailed or hand delivered to PGC headquarters during the period September 2 to 10 a.m. on October 2, at which time the public drawing will be held. If less than 100,000 applications are received from

September 2 to October 2, licenses will be issued thereafter on a first-come, first-served basis until exhausted.

Only the current official application form/envelope is valid, and under no circumstances may a person apply for more than one license. Not more than three applications may be submitted in one envelope. The appropriate pre-printed number on the outside of the envelope indicating the number of enclosed applications *must be* circled in ink. Also, a check mark *must be* placed in the appropriate box to indicate that the application is from a nonresident of Pennsylvania. Residents and nonresidents may not submit applications in the same envelope. The return section of the envelope/application must have sufficient first-class postage affixed and be self-addressed to any one of the applicants; if this condition is not met, all applications enclosed therein will be processed and placed in a dead letter file from which they can be reclaimed only by an applicant making the necessary arrangements with the Commission.

Remittances for licenses shall be in the form of negotiable check or money order made payable to the "Game Commission" for applications enclosed at \$10 each for residents and \$25 each for nonresidents of this commonwealth.

All licenses or applications will be returned to the individual whose name appears on the return section. It is the responsibility of this person to deliver the license or applications to the other individuals who applied with him.

Any application which fails to comply with the act or this section will be automatically rejected and returned.

## Thoughts While Walking

*A liberal is a man too broadminded to take his own side in a quarrel.*

—Robert Frost



COMMONWEALTH OF PENNSYLVANIA  
**HUNTING LICENSE APPLICATION**  
(Certified Check or Money Order in US Currency  
Required for Mail Orders from Non-Residents)

LICENSE FEES ARE NOT REFUNDABLE		Agent Write In	Agent Write In
Check Type(s) Desired In Block		Stamp Number	Stamp Number
Res. Ad. (17-64 yrs.)	<input type="checkbox"/> \$12.50	Res. Ad. Furtakers	<input type="checkbox"/> \$12.50
Res. Jr. (12-16 yrs.)	<input type="checkbox"/> \$ 5.50	Res. Jr. Furtakers	<input type="checkbox"/> \$ 5.50
Res. Sr. (65 yrs. & older)	<input type="checkbox"/> \$10.50	Res. Sr. Furtakers	<input type="checkbox"/> \$10.50
Non-Res. (Hunt)	<input type="checkbox"/> \$80.50	Non-Res. Ad. Furtakers	<input type="checkbox"/> \$80.50
Non-Res. Jr. (Hunt)	<input type="checkbox"/> \$40.50	Non-Res. Jr. Furtakers	<input type="checkbox"/> \$40.50
Muzzle Loading	<input type="checkbox"/> \$ 5.50		
Archery	<input type="checkbox"/> \$ 5.50		
5-day Non-Resident Small Game Valid From _____ To _____			<input type="checkbox"/> \$15.50
*Resident Disabled War Veterans Claim No. _____ Free <input type="checkbox"/> Claim No. _____			

ALL MAIL ORDERS — Add \$.75 POSTAGE \_\_\_\_\_ Furtakers Back Tag No. \_\_\_\_\_  
\*Available only from County Treasurers TOTAL \_\_\_\_\_ Hunting Back Tag No. \_\_\_\_\_

**PRINT PLAINLY**

Name \_\_\_\_\_  
(First) (Middle Initial) (Last) (Occupation)

Legal Residence \_\_\_\_\_  
(Street or R.F.D.)

City \_\_\_\_\_ State \_\_\_\_\_ (Zip Code)

\_\_\_\_\_ Phone No. ( ) \_\_\_\_\_  
(County of Residence) (Area Code) (Official Use, PGC Only)

Age \_\_\_\_\_ Color \_\_\_\_\_ Color \_\_\_\_\_ Weight \_\_\_\_\_ Height \_\_\_\_\_  
Hair \_\_\_\_\_ Eyes \_\_\_\_\_

Date of Birth \_\_\_\_\_ Sex: ☐ Male ☐ Female

Place of Birth \_\_\_\_\_  
(Post Office) (State) (Nation) Resident of Pennsylvania since \_\_\_\_\_

I present the following as evidence that I have completed the required hunter education course or have held a hunting license in a prior year:

Hunter Education Training Certificate \_\_\_\_\_ Date \_\_\_\_\_

A hunting license from a prior year \_\_\_\_\_  
State Year License#

I am unable to produce a prior hunting license, but certify below that I did hold a hunting license issued by \_\_\_\_\_ in a prior year.  
(State, Province, etc.)

Agents Not Responsible for Licenses lost by Mailing.  
Mail Application and correct amount of fee (Include \$.75 postage) to the **PENNSYLVANIA GAME COMMISSION, LICENSE SECTION, HARRISBURG, PA. 17105-1567. (DO NOT SEND STAMPS)**. All applicants must present proof of Hunter Safety Training or prior hunting license. (Preferably a photostatic copy). 5-day Non-Resident Small Game License not valid for turkey or big game. Mail orders for Resident Hunting Licenses must include positive proof of residency in this Commonwealth.

**AFFIDAVIT OF CORRECTNESS**

I certify that all of the above information and documents presented are true and correct and that my hunting privileges are not revoked for this license year.

(X) \_\_\_\_\_ (Date)  
(Signature of Applicant plus parent or guardian for persons under age 16)

I hereby certify that applicant has properly identified himself/herself and in my opinion is entitled to license(s) listed.

Signature of Issuing Agent) \_\_\_\_\_

## 1985 SEASONS AND BAG LIMITS

Species	Open Seasons		Daily Bag Limits	Maximum Possession Limits
	First Day	Last Day		
Doves	Sept. 2	Oct. 19	12	24
	and			
	Nov. 2	Nov. 23		
+ Rails (Sora and Virginia)	Sept. 2	Nov. 9	25*	25*
Gallinules	Sept. 2	Nov. 9	15	30
Common (Wilson's) Snipe	Oct. 19	Dec. 14	8	16
Woodcock	Oct. 19	Nov. 9	3	6

+ NO OPEN SEASON — King and Clapper Rails. \*Singly or in the aggregate of species.

### SHOOTING HOURS

Doves—12 noon to sunset Sept. 2–Oct. 19; 9 a.m. to sunset on Nov. 2; one-half hour before sunrise to sunset Nov. 4–23. Rails, Gallinules, Snipe, Woodcock—One-half hour before sunrise to sunset (except on Nov. 2, when the opening hour will be 9 a.m.)

### MISCELLANEOUS REGULATIONS

FEDERAL MIGRATORY BIRD HUNTING STAMP ("DUCK" STAMP) NOT REQUIRED TO HUNT DOVES, RAILS, GALLINULES, SNIPE, WOODCOCK. BOW AND ARROW, SHOTGUN PLUGGED TO NO MORE THAN 3-SHELL CAPACITY ARE LEGAL. RIFLES AND HANDGUNS ARE PROHIBITED. SHOT SIZE LARGER THAN BB PROHIBITED. NO HUNTING ON SUNDAY.

## ***GAMEcooking Tips...***

### **Making Corned Meat from Game**

If you are fortunate enough to bag a large game animal this year, one that yields a great deal of meat, this recipe will give you some variety in the preparation and taste. Making a corned beef-type roast is fun and interesting. This preparation works well for all large game animals. It will work with moose, caribou or elk, as well as venison.

### **Venison, Corned Beef Style**

- 4–6 pound boneless roast  
(venison, moose, caribou, elk)
- 3 bay leaves, crushed
- 1 tsp. cloves
- 1 tsp. mace
- 1 tsp. allspice
- ½ tsp. crushed peppercorns
- 4 tbs. brown sugar
- 1 tbs. salt
- 1 tbs. pepper
- ½ pound coarse salt
- 1 tsp. garlic powder

### **by Carol Vance Wary**

Clean and trim roast. Mix dry ingredients and rub spices into all sides of meat. Place roast and extra spices in a large ziploc freezer bag. Pat spices into the roast again, shaking bag to distribute extra spices. Refrigerate seven days, turning and rubbing the spices into the meat each day. After first day, roast will be marinating in its own juices.

On seventh day, rinse under cold water and discard spices. Tie roast securely with twine at 3–4" intervals to prevent separating. Place in large kettle and cover with water. Bring to a boil and reduce heat. Simmer covered 5 hours. Remove from heat, drain and cool. Wrap in foil, place between two boards and weigh down. Cutting boards work well for this, and a pot of stew or soup makes a good weight! Refrigerate 12 hours.

Prepare as you would corned beef. Simmer in water with potatoes and cabbage or slice thin, against grain, and serve in sandwiches. This product will be slightly drier than beef, as is always the case with wild game and its low fat content.



# Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Douth, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

## Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

## Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

## Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 by Ned Smith) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

## SPORT Items

_____	Fluorescent Orange SPORT Cap .....	\$ 4.00
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

## GAME NEWS

_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 5.00
-------	--	---------

## Waterfowl Management Stamps (Voluntary)

_____	1985 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

DO NOT SEND CASH

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

# Why I Hunt

**F**OR MANY years now, we've kept a diary, my husband and I, of our outdoor experiences. It's nothing elaborate, just a log of day to day hunting results and notable wildlife encounters. It's a nice memory jogger and does take the edge off exaggeration, when one of us knows the other can prove or disprove a story by "black and white." I was making a belated entry in the book last week when I got to flipping the pages, thinking about this fall's hunting seasons. How many years have I been hunting? It must be over fifteen. I tried to remember my first day . . . and couldn't. I wondered if we'd noted it in the log.

It was September 27, 1969, the first day of that year's archery deer season. All that was on the page were the facts that I was one of a group which included my husband, his brother and his dad, that we hunted a Game Lands in the Laurel Highlands, and that no deer were taken home. But I remember more.

I remember the middle of the night alarm and Dad's call from the kitchen—"Come on, the coffee's ready." I remember the chill night air of late September, hinting at November, and of dozing fitfully in the warm car as we sped along highways and rumbled down back roads that led to the mountains. I half-listened to the talk about where everyone was going to hunt that day and the stories of other bow seasons.

The car pulled onto a particularly bumpy road and I sat up and looked out at the blackness. Wouldn't daylight ever

come? Then I craned my neck to see higher, and there was the pale light of dawn over the dark hulking mountain. I recall my companions talking in whispers, so unlike their at-home selves, and closing the doors softly. We made arrangements to meet for lunchtime, and then my husband and I started up the logging road. I was a few minutes catching up to him—he'd gone on ahead like an eager hound dog—and when I arrived he smiled and said, "Now, aren't you glad you went hunting?"

## Reasons Change

I said yes that day, and I'd give the same answer now. But if I'd been asked why I was happy to be there, I know my answer would have been different then. I don't hunt for the same reasons now as I did in 1969. After all, the sport was unexplored territory to me then, and though I had a notion I'd like it, who could tell? What are any of our thoughts when we decide to try hunting? "It sounds like fun." "I want to be outdoors in the fall." "I enjoy shooting and I think I'd like to go home with a big buck." Or is it more often something like, "The rest of you seem to be having such a good time, I think I'll go with you"?

I have a feeling that most of us start hunting because of other people. We want to join in some of those good times that our friends, relatives or spouses have been talking about. And we do just that. Dressed in our hunting clothes, we have early morning breakfasts in roadside restaurants; we meet after a deer drive to tally what happened and joke with the one who let the buck sneak past; we hear the shot and walk over to admire the freshly killed gobbler, called in and taken by someone we care about.

Of course, this sharing of experiences is an important part of the pleasure of the hunt. But if having fun with friends is the only reason a person goes hunting, he might as well go to a ball game.

## Another View...

by Linda Steiner





**NOT ALL PEOPLE** hunt for the same reasons. In the end it's a personal decision, and the reasons can vary over time.

There are easier pastimes and comradeship, and the urge to hunt can wear pretty thin when it's the last day of buck season and there's an icy rain. If a hunter's still out there then, he hunts for a different reason. It's his own personal love of the sport that drives him. He needs no one else to help him savor it.

### Personal Love

Though I can't turn to a page in the logbook and find the date, I know that somewhere in the past personal love of the sport came to me. My hunting days, I hope, will always include some time with friends, but that has long since become a secondary inducement. My first day of hunting was like opening a door just a crack. I know that when those two deer jumped up out of the shadows and bounded off through the frosted meadow, turning to gold in the morning sun, I shivered. And it wasn't from the cold. I'd had a brief glimpse of something through that slowly swinging door.

Since then I've seen quite a vista, and I've learned that the joys of hunting lie in using my senses and wits in ways I'd

never done before. I've begun to read the riddles of the woods, the puzzles of game sign and wildlife habits. And I've come to know, with wonder, that although I carry the gun or bow, I go human-clumsy into a world whose natural inhabitants are for sharper of eye, ear and nose than I.

I see the diary entry of a day a few years ago, the opener of the early small game season. Because of work or other plans, no one could go hunting with me, so I went alone. After breakfast I drove to a nearby Game Lands in the north-eastern part of the state, where we lived at the time, to hunt squirrels with my 22. Only a couple of cars were in the parking lot when I shouldered my rifle and tucked my long hair under an orange hat.

The day was a last gasp of summer, October masquerading as August. I walked a trail and then followed a stream down a rocky hollow shadowed by oaks and hickories. There were plenty of nuts that year and the hulls told me of squirrel activity. I settled down between the roots of a big tree, my rifle on my knees, to watch a couple of den trees and a group of leaf nests.

I was contentedly watching a woodpecker hammering the tree next to mine when a trio of deer came through. Picking their way across the hollow, they stopped just in front of me, the big doe swiveling her ears to check her back-track. Then they took off, flagging. Not long afterward, a hunter appeared.

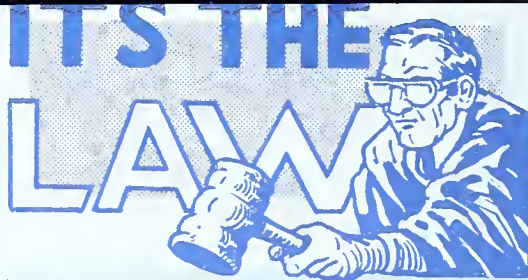
He spotted my orange cap and waved, and then walked over to chat. I noted surprise on the man's face when he saw I wasn't just another guy. He recovered, though, and asked how I was doing (by then I had one gray), and added, "Where's the rest of your gang? I don't want to walk in on them and spoil their hunting."

"There's just me," I said.

He looked at me kind of funny again and said he'd hike "on out the ridge," and "good luck."

I know his surprise was at seeing me hunting alone and, the truth is, though the women in the sport enjoy it as much as the men, we're still thin enough in the hunters' ranks to draw a look.

I was surprised, too, but for a different reason. I realized that day that I was sitting there in the woods, with a gun on my lap, because it made me happy.



#### Question

May I hunt in unharvested grain fields?

#### Answer

Yes. However, only with the specific permission of the owner or person in charge of such fields. If no permission is obtained, it would be unlawful to hunt in buckwheat, corn, sorghum or soybean fields.

It was something I wanted to do for myself alone, a pleasure and satisfaction that didn't depend on companions. I was hunting because I loved the hunt itself, with no strings attached. Its own attraction was enough, the best reason of all for being and staying a hunter.



**GEORGE BAKER JR.**, of Shenandoah, took this nice 18-lb. gobbler in Schuylkill County. It was highly unusual in that its 4-inch beard was as yellow as the bristles of a new broom.

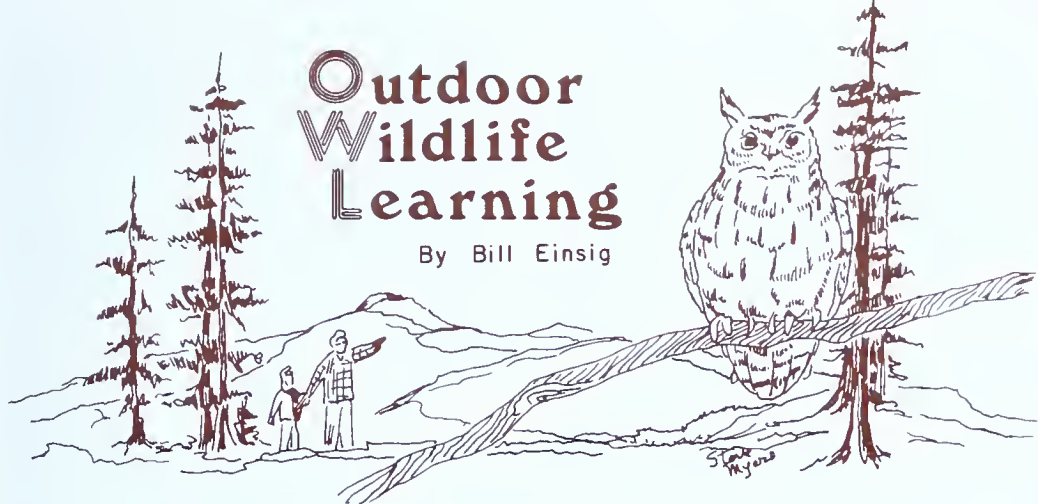


**DAVE HALINKA**, Belle Vernon, bagged this nice buck in the Hicks Run section of Elk County. It was his fourth deer in four years. He also took three others in earlier seasons.



# Outdoor Wildlife Learning

By Bill Einsig



## Let Bluebirds Work For You

Environmental education programs in schools don't grow overnight. They usually start small and, with careful and patient cultivation, mature into productive complements to the school curriculum.

Existing programs can be frustrating because they seem to have so many things going for them that are out of the question for young programs just taking shape. Fulltime staffs, heavy budgets, and dozens of ways to be involved with students all come with time and patient leadership. None of the programs started out this way.

More than likely, their roots lay in a single idea—one well-conceived effort that produced good results and earned the confidence of school administrations and parents alike. In some school districts, environmental programs grew from camping experiences; in others, a series of local nature walks or field trips got the ball rolling. In almost all cases, though, there was one person with unusual commitment who cared less about the time spent at work than about the work at hand. Given that kind of dedication, and the right initial project, most districts could begin a school-wide program of their own without big bucks from the school board or federal grants. But what is the "right" project?

### The Right Project

If I found myself in a small conservative district, without much money and little interest in the school system for environmental projects, I would start first with a trail of bluebird boxes. The advantages of such a trail are enormous. Consider these:

1. *Bluebird boxes are inexpensive.* A simple box can be cut from a 1" x 6" x 6' pine board. Add nails and a simple post

and the total cost per box is less than three dollars. If you scrounge for scrap-wood and old pipe, the cost drops even lower. A trail of ten boxes should cost \$25 or less.

PTO's will often pay for this kind of project if the science budget can't handle it, and various community groups might welcome the opportunity to get involved. In fact, taking money from some willing group broadens support for the project and will be valuable as the program expands later on.

2. *Bluebird trails are popular.* It's about as easy to argue against motherhood and apple pie as it is to be against bluebirds. Stories and photographs of kids and bluebirds are almost sure to run in the local newspapers, so publicity is easy to arrange. That might not be true with more controversial environmental projects.

3. *Bluebird trails are easy projects for kids.* Some adult help is needed to cut the wood for younger students, and setting a solid post usually requires a bit more muscle than the kids can muster. But other than those two jobs, youngsters can do the work themselves. Even after the boxes are erected, teams of trained students can complete the more tedious chore of weekly monitoring.

4. *Bluebird trails produce meaningful data.* Few science programs get students involved with real research. Yet bluebird trails easily do that. The notes students make on dates of nesting, clutch size, frequency of predation and other factors produce valuable information useful for local reports and for comparisons from year to year. In addition, the data can also be used by biologists working at the state level.

Several efforts are underway in Pennsylvania to pool such data from widely scattered trails. Students can be part of such an exciting project in a real way.

5. *Bluebird trails are adaptable.* Almost any suburban or rural school has enough room to erect a few boxes. Experts say boxes should be 100 yards apart, but no harm is done if the boxes are closer. Bluebirds might not choose to nest in many of the boxes that are crowded but other species will. A trail with wrens, chickadees, titmice and nuthatches is as valuable a learning tool as one with all bluebirds. Even a few house sparrow nests (do I dare say this?) can be used on a school trail.

Kindergarten and first-graders need much more help in constructing the bluebird trail than do junior high youngsters, but their enthusiasm is almost without limit. Put a trail at your building and every teacher will have a solid reason to take their classes on a walk outdoors.

6. *Bluebird trails don't require much time.* Once the trail is constructed, the project is really a seasonal affair. Boxes must be inspected, cleaned and repaired in February or early March. Bluebird courtship and nesting begin in early April, so monitoring by students should begin then and continue to the end of the school year. Usually, a student volunteer or interested adult can continue monitoring during the summer if data collection is an important part of the project.

7. *Bluebird trails are an educationally rich experience.* Students do library research, learn to use small hand tools, to measure and make careful observations and take accurate notes. They also learn to accept the responsibility for managing the nesting trail they have constructed, and that a cooperative team effort produces better results than they could achieve working alone.

Properly constructed and promoted, a local bluebird trail can provide the starting point for environmental projects of other kinds. Classes walking the trail might become interested in topics such as wildflowers, common weeds, methods of seed dispersal, campus soil erosion, insect homes and a host of other topics that make youngsters aware of the world outdoors.

In addition, the history of the bluebird population over the past hundred years illustrates dynamic interactions of wildlife and their habitat, and thereby lays the foundation for understanding techniques and goals of management. The possibilities for

additional projects are almost endless and, with the support and confidence generated by the first simple trail, those expanded projects will be more easily approved.

## Getting Started

The first step is usually the toughest, but the following checklist will make things a bit easier.

1. Locate a local bluebird expert who can help plan your project, recommend a box design, choose the best locations and suggest monitoring plans. Your local game protector is a logical first stop for advice.

2. Have a kickoff lesson. A guest speaker with sample boxes and a slide program on bluebirds will get the class excited. The North American Bluebird Society (P.O. Box 6295, Silver Spring, MD 20906-0295) produces an outstanding slide program. It contains 141 35mm slides and answers many questions about bluebird nesting cycles, predators and tips on organizing a trail.

3. Find sources of materials and tools. Talk to the PTO, local lumber yards, construction firms and conservation groups.

4. Erect posts without boxes in the fall before the ground freezes. The boxes can then be built during the winter and hung in early March.

5. Set the posts first using a digging iron to make a pilot hole. Hammering a post with box attached causes the box joints to loosen. Remember, kids will want to see the nests, eggs and young birds, so keep the boxes just three to four feet above the ground.

6. Schedule building sessions. An adult can pre-cut the pieces and help youngsters use the handtools. Tools needed include hammers and a hole saw or spade bit for an electric drill. I like to use an old-fashioned brace to cut the 1½" entrance hole. Build, paint and number the boxes before they are mounted on the posts.

7. Finally, plan the monitoring program. Decide what information will be collected, how often and by whom. A class of students could work in teams caring for certain boxes or only a small group of the most interested students could monitor all the boxes.

The bluebird trail can be a starting point or a complete environmental experience by itself. Either way, students and adults will see the natural world in new ways and understand our responsibility to it as never before. In the final analysis, that's what education is all about.

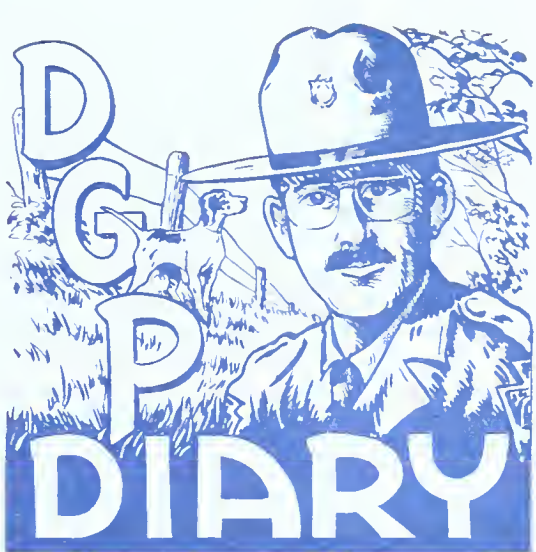


**S**EPTEMBER is the unofficial start of our busy season. There are still no major hunting seasons in progress, but fall arrives early in the northcentral mountains and with cooler nights comes increased poaching. Hunter education courses are in full swing, as are bear incident complaints, and there always seems to be a host of odds and ends that must be tied up prior to archery season.

*September 2*—I am conducting the annual firearms qualification for Cameron County deputies. It is a mere formality, though, as they all have been practicing since snowmelt in March. After each officer has demonstrated his ability with both service revolver and police shotgun, we conduct an informal meeting to brainstorm some ideas for the upcoming hunting seasons.

*September 3*—Although it is a state holiday (Labor Day), I spend the entire day with bear incidents. Researching this column I find that out of 135 holidays, weekends, and scheduled days off last year, I was successful in taking only 18 of them off. It seems that game protectors are at the mercy of the telephone, and if we don't leave our districts on our days off, someone usually finds something they want us to do.

Today I'm faced with the classic case of the Game Commission being caught in the middle between a group of people who want to feed and make pets out of bears and another who are fed up with the problems which come hand in hand with this type of activity. Bears accustomed to being fed in the vicinity of the George B. Stevenson Dam have been disrupting activity at the Sinnemahoning State Park. They have been coming into camping and picnic areas, frightening the public, scattering garbage, and just being general nuisances. In addition, camp owners are complaining. But the final straw came on this day after the State Police, on two different evenings, had to dispatch a unit to a location along Route 872 where dangerous traffic jams occurred as people, seeing the bears coming into a feeding station, stopped on the highway, got out of their vehicles—often leaving the doors wide open—and halted traffic in both directions! Both times this happened right on the crest of a blind knoll, at a spot where anyone traveling south at a high rate of speed



By Joe Carlos

District Game Protector  
Cameron County

would never have time to stop.

In one instance, when a bear attempted to cross the road, it was ringed with photographers and couldn't even leave the pavement. I use the term "couldn't" loosely because had the bear become angry or excited I am sure it would have scattered everyone and perhaps mauled someone who got in its way. The same thing happened a year ago and I spoke to the people responsible. I explained the hazards and asked that they stop such feeding. When they ignored my advice, we began a bear roundup which resulted in the capture and relocation of four bears. I hope that similar drastic actions can be avoided this year.

*September 4*—I have been asked to do a program for the Emporium Rotary Club, and after the customary luncheon I show the video tape from the N.R.A., *Gunfight U.S.A.*

*September 6*—I caught a bear at the Jim Kempher residence on 7th Street, Emporium. It had been knocking over beehives. Bears have been extremely bold this year, coming right into town. We received a total of 22 complaints from 6th and 7th Streets, Plank Road Hollow, Prospect Park, and South Mountain residents during the month. This bear is a 185-pound male which Deputy Brehm and I process and relocate to the extreme southern end of the county, about 20 air miles away, in the vicinity of Sandrock Road.

*September 7*—I receive a phone call this morning from a very frightened mother, Lois Braden. The Bradens live on Sizer Run Road, only a short distance from another bear feeding hotspot. When Mrs. Braden heard screaming from the yard she looked out the window to see her daughter cornered by a bear. After grabbing a 38 snubnose revolver on her way out the door, Lois fired several shots into the air to ward off the bear. But the bruin stood its ground, neither retreating nor advancing. Finally, as Lois fired several more shots and screamed, the bear turned and nonchalantly walked away, obviously unimpressed by the whole affair.

We have had a lot of trouble with these bears. We've caught them by every conceivable method, from trap to snare to dart gun, but as fast as we relocate them they come right back. Now many are so trap shy that it is virtually impossible to catch them again. We are sitting on a time bomb and I fear that an innocent person is going to be seriously injured before some people learn that bears are wild animals with the potential of being very dangerous.

*September 8*—PGC firearms instructors Jim Neely, Ron Clouser, Jim Rankin, and I are presenting a course to a group of approximately 30 northcentral deputies today at the training school near Brockway. Since night firing is included, it's midnight when I arrive home, quite exhausted.

*September 10*—I have been assisting District Forester Bob Martin with the state's bird breeding atlas project. We are trying to determine which species and how many of each nest here in Cameron County. A large portion of the day is spent visiting Clayton Schlemm who has been helping me by keeping tack of sightings near Sinemahoning. We have identified a large variety of birds through the spring and summer.

*September 11*—I'm fortunate in having NRA field representative Dr. Alan S. Krug as my guest in the county today. I interviewed Dr. Krug a few years back when I was doing a biweekly radio series called Cameron County Game News. We became friends and have kept in touch ever since. We begin the morning by taping a special radio program at WLEM on the history, organization, and activities of the National Rifle Association. Later, Dr. Krug is the guest speaker at a luncheon meeting of the

Emporium Rotary Club where he is enthusiastically received. Since we share so many common goals, the NRA and Game Commission have enjoyed an excellent rapport for many years.

*September 13*—This evening Charlie Baker and I set a bear trap at Erskine's Grove in a cornfield belonging to Bernard Bauer.

*September 14*—Much of the day is spent writing my DGP Diary column.

*September 15*—The other firearms instructors and I are back in Brockway, conducting another qualifying shoot for a different group of northcentral deputies. True to form, I arrive home at midnight, thoroughly worn out.

*September 17*—The day is divided between the bird breeding atlas and radio maintenance.

*September 18*—This morning I receive a complaint from Larry Weidenboener about two bears on the porch of Hemlock House, a youth facility near an area where bears are being fed. Charlie Baker and I spend the afternoon setting the trap. We catch a number of bears each year near Hemlock House.

*September 21*—I spend several hours in the office typing my DGP Diary.

*September 22*—My deputies have not gone through the night firing course yet and some of them want to practice beforehand. Therefore, I leave the house at noon and don't return until midnight.

*September 24 & 25*—Each fall, prior to the opening of hunting season, we attend a two-day law enforcement workshop at the training school. The purpose is to bring us up to date on all changes in the Game Law and administrative policies. The days average about 13 hours each, and at the end of the seminar I always have to return to my normal duties to "get rested back up."

*September 27*—We have caught the bear at Erskine's Grove and Deputy Danny Brehm processes it under the watchful eyes of a group of onlookers. The tag numbers show it is the same bear we captured only two weeks earlier at Jim Kempher's in



Emporium. True to form, the bear had come back. Danny and I begin a long drive to Marienville, over 35 air-miles away, certain the bear will never return from that great a distance in time to be a problem any more this year. (Postscript: It did return in time to be shot in bear season just a short distance from its old stomping grounds at Erskine's Grove.)

September 28—I conduct a deputy training meeting this evening, disseminating information I received at the law enforcement workshop while it is still fresh in my

mind. Although almost 10 percent of my time is spent recruiting, training, equipping, and administering the deputy force, the tremendous returns to sportsmen in terms of services professionally performed by these volunteer officers has shown this to be a wise investment.

September 29—Deputy Danny Brehm and I are on night patrol tonight. The deputies and I have confirmed that several deer have been shot and left lying in the vicinity of Moore Hill. The evening is uneventful.

---

## Books in Brief . . .

(Order from publisher, not from Game Commission)

**Fifty Hikes in Central Pennsylvania**, by Tom Thwaites, Backcountry Publications, Inc., P.O. Box 175, Woodstock, VT 05091, 200 pp., softbound, \$9.95. Complete descriptions of 50 hikes in the central third of Pennsylvania, the area between U.S. Routes 219 and 15. USGS contour maps, distance, hiking time, vertical rise and area highlights are included with each description. Twenty hikes are either new or have been changed significantly since 1979, when the first edition of this book was published.

**Turkey Hunting With Charlie Elliott**, by Charles Elliott, Cherokee Publishing Co., P.O. Box 1081, Covington, GA 30209, 275 pp., \$16.20 delivered. As the southern editor of *Outdoor Life* and former director of Georgia's game and fish department, the author provides a well written and authoritative account of turkeys and turkey hunting across the country. Whether seasoned callers or beginning yelpers, turkey hunters of all types will enjoy and learn from this offering.

**BEN: The Adventures of a Hunting Retriever**, by John Troy, Willow Creek Press, P.O. Box 2266, Oshkosh, WI 54903, 96 pp., \$14, delivered. This collection of 149 cartoons runs through the seasons with Ben, the hunting dog who leaves his master wondering who's boss—something every dog owner can relate to. This cartoon feature appears in many outdoor magazines, including *Outdoor Life*, *Field & Stream* and *Ducks Unlimited*.

**America: Land of Wildlife**, by Karen Jensen and the editors of National Wildlife Books, National Wildlife Federation, 1412 Sixteenth St. NW, Washington, D.C. 20036, 160 pp., \$20.50, delivered. Sit down, relax and enjoy this outstanding pictorial display of our country's wide variety of wildlife. Spectacular color photographs throughout, of the quality expected of the NWF, cover the natural beauty of America, from the mountaintops to the coasts.

**100% Fox Trapping: A Complete Course**, by Dan Kroll, Spearman Publishing & Printing, Inc., from the author at RD 2, Lot 70, Kutztown, PA 19530, 90 pp., softbound, \$6., delivered. Nothing fancy, just good information and sound advice for trappers who want to catch more fox and those who want to catch their first. After a discussion of fox behavior, the author covers set locations, trapping equipment and care, baits and lures, and proven sets. Preseason work and what to do after the animal is caught also are covered.

A FRIEND once told me that, if forced to choose, he would sooner give up his sight than his hearing. I thought his choice an odd one. Then I began to listen.

I live, as you may know, in the woods. Here I am surrounded by sound, an ever-changing symphony that by turns soothes me, annoys me, energizes, mesmerizes, scares, reassures, wakens, lulls, saddens, and fills me with joy.

It all starts in the spring. Not with the birds, as you might imagine, but with creatures considerably less obtrusive: frogs. On a warm early-March day, somewhere on the boundary between winter and spring, I stop whatever I'm doing and listen: *clack clack clack clack clack* goes the sound, like rocks being rolled together in a stream. The wood frogs are singing. The clacking is designed to get the sexes together, and it issues from a pond down the hill.

Following the wood frogs, another frog tribe gravitates to the pond: the spring peepers. Their call is a shrill *preep* in two slurred-together notes, the second slightly higher than the first. Up close, the sound cuts straight into your head and grates inside; from farther away it is reminiscent of sleighbells.

### Others Join In

Other amphibians join in. The chorus frog goes *crreek crreek crreek*—like someone rasping his thumbnail across the teeth of a comb. The American toad lifts a pleasant musical tremolo that sounds from every quadrant on warm, rainy nights. Fowler's toad looks a lot like the American toad, but is rather less musical: he bleats like a sheep—*w-a-a-a-h*. There is also the bullfrog (*jug-o-rum*); the green frog (a loose banjo string being plucked); pickerel frog (assorted snores); and the gray treefrog (a flutelike trill not too different from a red-bellied woodpecker's rattle).

Of the birds, the first one I hear in spring is usually the ruffed grouse. I have grouse drumming all around, as if announcing that my house is under siege. Only the male grouse drums, by

# Thornapples



Chuck Fergus

sitting on a prominent log or stump and pumping his wings up and down through the air. He tends to give three preliminary whacks, as if unlimbering his muscles, pauses for a moment, and launches into a series of whacks that gradually accelerate into a muffled drumroll, subsiding after ten or a dozen seconds. The individual beats seem to hit me, one by one, between the shoulderblades.

Some time after the grouse open the siege, the big guns are brought in: the whippoorwills. For several weeks, they send their calls caroming through the woods each and every night. If the moon is full, *all* night. Up close—and they do get close—I can make out a loud *knock*, presumably verbal, right before the bird belts out the triplet: *whip-poor-will*. Each year my wife and I wait for the first call. Whoever hears it wakens the other, and we know that spring has officially arrived.

Besides the drumming and yelling, we have the flicker's *wickawickawick*, and, louder and more lunatic, the pileated woodpecker's laugh. There is the wood thrush's haunting, flute-like call, whose first few notes—*ee-o-lay*—describes it fairly well—remind my wife of the beginning of Prokofiev's Second Piano Concerto. Among others, we have the rose-breasted grosbeak's ornate, virtuosic trill, the towhee's insistent *drink-your-tea*, the bluejay's raucous *jay jay jay* as well as his *wheedelee*, which



sounds like a screen door swinging on a rusty hinge. Also the cuckoo's *cucucucu* (he is known as the rain crow, because he often sings just before a shower), the phoebe's *fee-bee*, the pewee's *pee-o-wee*, and the crested flycatcher's *WHEEEP*, which makes you think someone is running amok with a stream whistle.

One morning this spring, I was sitting in a chair under a tree, reading. The call came from so close, and was so weird, that I almost left my seat: a quavery wail that rose and fell, a banshee's scream. I knew it was a screech owl, although I never saw the bird, and I heard it again a few weeks later — also, oddly, in the daytime, when most owls are keeping mum and resting up their vocal chords for the night.

We have a pair of ravens. They live on the mountain, and they can talk. They have a language, and a fairly complicated one, judging from what I hear: phrases like *kaa kaa*, *kuckuck*, and *rackrackrack*, plus assorted loud announcements and hot imprecations and guttural commands which have separate and different syllables and differing intensities and pitches and tonal nuances, and which probably mean things like, "Oh, good, they threw their grapefruit rinds on the compost pile this morning," or "Let's go look for squashed toads on the road," or "Quit

doing those stupid barrel rolls and fly right-side-up."

And the crows. They skulk about, sometimes as silent as shadows, more often cawing with great insolence. On a certain day each year in late spring, a pair in the neighborhood fledge their nestlings. Up until that time, the family has been most circumspect, never calling around the nest, to keep it hidden. Then, pandemonium. When the young birds get out on their own for the first time, they squall and whine and squawk and otherwise fuss, the sound moving about our woods, now up by the road, now down by the pond, now over by the big oak, until night falls and the parents get them together and manage to hush them up. Which is a good thing, because we have horned owls who listen.

### Sounding Like Summer

At some point each year, I realize that spring is sounding like summer. Urgency is missing, replaced by fullness, a composite music of insects, birds, and vegetation, modified by weather.

The trees are fully leaved, and the wind permits them to sing. An aspen sings a bubbly sort of song, while an oak hums and a maple seems to croon. A walnut whistles, more or less, on account of its leaves being made up of many small blades. A pine whispers. I like to sit on a stump, close my eyes, and listen to a gust of wind approaching. It pours through one tree, sifts through the next, enlivens a third, delivers a humming to one ear and then a crooning to the other, passes onward, and is gone.

Thunder rumbles eerily through the woods, tumbling down from the mountain or percolating up from the valley. Sometimes it comes crashing all around — a close lightning strike is preceded by a faint hissing and clicking that make the hairs on my arms want to stand on end.

Another summer sound is full of dread, a sound I heard up close a few years ago. I was walking through the woods, the sun pouring down, robins



clucking, insects clicking from the laurel, here and there a towhee rustling the leaves. I started to step over a log, and was drenched in it: a sudden sizzling of fat in a red-hot skillet. My heart shot a burst of heat through my body, and my legs leaped back. The rattlesnake was thick and tightly coiled, with a fist-like, wavering head. I thanked him for his vile music, and left.

### Sounds With Message

I'm remembering sounds with a message. A female black bear, especially one who judges you too close to her cubs, can issue an exceedingly understandable one. It is produced by gnashing the teeth rapidly, and it sounds like treading on lightbulbs. There is also the chacking of redwing blackbirds as they hover above your head and send you away from their nests, and the scream — faint, then swelling, then suddenly cut off — of a rabbit being rent at night.

Most summer sounds are more or less pleasant ones. Rain dripping from the leaves. Deer snorting and stamping their feet before pummeling off. A bumblebee's throaty buzz as it wobbles past your head.

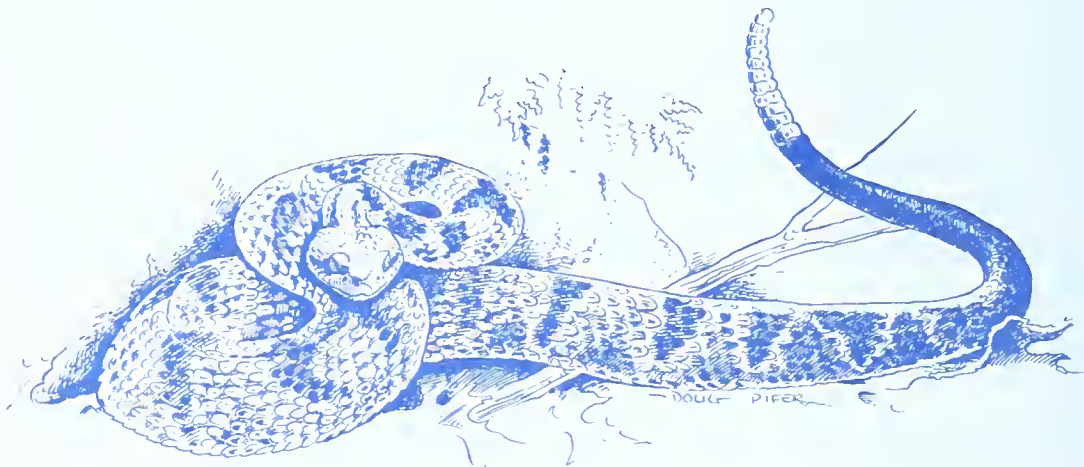
By late August, meadow grasshoppers are providing a steady background static in the day, and katydids are crying their name in the night. The katydids will sing through September and

even into October if the frosts are late. The sound is full of surfeit and weariness. I like the way Hal Borland described it. The katydids, he wrote, "are personally shaping the season, filing the echoing edges of the night, scraping them, fitting August to September to Autumn."

As a hunter, the sounds of fall set me on my feet. Out in the coverts, I hear wild geese honking above the fog on damp, chilly mornings. When a grouse goes out, its wings slap loudly in the air and go *whapwhapwhap* against branches that get in the way. A woodcock takes off in a skitter and a whistle, slightly unconcerned; a pheasant flaps up cackling, as if disbelieving that danger is at hand.

The red squirrel's chitter announces to the world that I am out and about. His cousin the gray squirrel makes three calls: a hollow knocking that echoes through the woods and is exasperatingly hard to locate; a fast clicking that warns (I can mimic it with my tongue to make a feeding gray freeze); and a nasal squall that sounds like a cat (or like a catbird, for that matter, but they are already flown south).

Autumn is a pastiche of sounds. The far-off, slanderous commotion of crows mobbing a hawk or an owl. Deer footfalls — slow, pausing, scuffing as a hoof teases out an acorn. Stream water licking, lake water lapping, walnuts walloping the ground, the rising squeal of





a wood duck in a boggy brake.

The sound that sums up autumn for me is a sound made of millions of sounds. I was out after grouse when I heard it last fall, and it made me sit and listen. It came from the leaves. They were ticking their way down through twigs and branches, scratching against bark, settling with a sigh on the forest floor. All over the woods, the same inexorable hissing, without crescendo or meter or key.

Winter is minimal sound. A woodpecker at a tree — not the stylized drum-roll of a springtime bird summoning a mate, but the erratic, persistent pecking, splitting, splintering of a bird at work after food. The dissonant tinkle of ice, when it grows too heavy for the laurel's slick leaves, and falls. A branch creaking. A distant snap.

In winter I listen for the sharp barking of fox, the wingbeats of chickadees up close, and the hollow hooting of the horned owls, who choose this cold time of year to lay eggs and raise young, so that their offspring can be on top of things when spring rolls around.

The wind roars through the gnarled

## The Wingless Crow

*The Wingless Crow* is a 200-page hardcover book made up of thirty-three of Chuck Fergus's "Thorn-apples" columns which have appeared in GAME NEWS. Wonderful reading for your own collection or as a gift. Order from the Game Commission, Dept. AR, Box 1567, Harrisburg, Pa. 17105-1567. \$10 delivered.

rock oaks on the ridge. It snarls down the slope, mumbles through the branches of oaks and maples around the house. The leaves no longer sing; sidling this way and that upon the ground, they make a slick rustle, a faint gasp. They fall silent under the sibilant gathering of snow.

Silence.

Sometimes, on a bitter February night, it truly is silent out here. I go out and stand under the stars and listen. I speak, and the word throbs, and is gone. Silence. Maybe the faint pulsing of blood in my heart — no. Silence.

---

## Osprey Alert

Twenty-five young ospreys were recently released from three hack towers at secluded sites in the Poconos. This brings to 105 the total number of birds released in the past 6 years. With funding from the Pennsylvania Game Commission's Working Together for Wildlife Program and state Audubon chapters, researchers from East Stroudsburg University initiated this project in 1980 in an effort to reestablish a population of breeding ospreys in the state. Ospreys are fish-eating birds of prey. They used to be found along major waterways here, but because of water pollution and especially the reproductive-inhibiting effects of the pesticide DDT, they haven't been known to nest here in decades. In November, 1984, the Pennsylvania Game Commission upgraded the classification of the osprey to endangered, providing it with the maximum protection afforded by law.

This past summer, three ospreys hacked in previous years returned to Pennsylvania, built nests, and attempted to court mates. Although none were successful, project specialists are most encouraged by these developments.

Colored leg bands were placed on this year's birds and their wing tips were color-dyed to permit ready identification. If you should see any of these marked birds, or know of any instances in which any ospreys are being harmed or destroyed, report all details to your local district game protector, or to Dr. Larry Rymon, Osprey Project Director, East Stroudsburg University, East Stroudsburg, PA 18301, (717/897-6615).

For bowhunters . . .

# SWITCH SHOOTING

By Keith C. Schuyler

Photos from the Author



**W**ITH ARCHERY season only weeks away, most bowmen are practicing now in earnest. This certainly is how it should be, as all those who hope to test their skills on living creatures should be preparing themselves on the practice fields. In anticipation of the coming season, many archers are now making the switch from target points to broadheads to learn exactly how their equipment per-

forms. In making this switch, however, many are experiencing problems.

A letter from Raymond L. Leininger, Chambersburg, prompts an in-depth look into the problems attendant to making the switch—successfully. Like others who have to be convinced that broadheads will not necessarily fly exactly like field points of the same weight, he freely admitted to a problem that plagues many of us at one time or another.

“Never believed the story that a broadhead will not fly the same as a target point,” wrote Raymond. “I figured they would be within an inch or two of the others—that is, until I purchased a broadhead-type target butt.”

In analyzing the problems associated with switching heads, we must first assume that the change is from field-type arrows. Arrows used for both indoor and outdoor target shooting are frequently much lighter and have smaller fletchings than those normally used on the field courses which simulate hunting conditions. This generalization, however, is much less applicable today, for many archers use the same size shaft and hunting-weight field point for both target and field shooting, just to minimize the problems incurred when switching to broadheads for hunting purposes.

There is no sympathy here for the so-called hunter who simply buys a bow and arrows and a license and goes big

**PRESEASON TESTING** can tell a bowhunter how switching arrowheads might affect performance. This knowledge can be of vital importance in the field.



game hunting without prior practice. Such a person may be legally within bounds, but his actions are morally indefensible. Conscientious archers invest a great deal of time and effort into developing their skills and becoming proficient with their tackle before venturing into the fields. There are enough challenges to our abilities even when we have put forth our best effort to be prepared.

Back to switching points, though. Even when a hunter selects a broadhead of exact weight to the field point that has been flying well, he still finds that results with the broadhead are erratic. What is the problem?

First, it may be that the arrow spine is barely adequate for the bow being used. Substitution of a broadhead may make just enough difference that the new combination is unacceptable. Even though the head weight is almost exactly the same, distribution of that weight compared to the size of the projectile can make a noticeable difference. A lighter or heavier shaft, due either to diameter or wall thickness, may bring the arrow on target.

### Only Practical Way

The only practical way to check this out is to obtain a variety of shafts with identical fletching but different spines. Shoot them repeatedly to determine if it makes a difference and, if so, which shaft is best. It makes more sense to experiment first than to buy a dozen new arrows and discover you have made a bad choice. My bet is that if you find a shaft that carries the broadhead well, it will also work well with field points, but the reverse procedure is more likely to cause problems.

Even before you go to this extreme, check your fletching and your arrow rest. If you use plastic vanes for fletching, a vane may be touching the riser when you release. Or perhaps it is brushing the arrow rest on its way from the bow. These problems might not be evident with field points even though they have existed. Your fletching may be stabilizing the arrow sufficiently with



**GARY SHINGLER** looks down length of completed arrow, searching for any imperfections. A new archer might believe all equipment is perfect when he gets it. Old-timers know better.

field points that you have been getting away with it. Think back, however. Do you occasionally have a field point go astray, even when you thought you had a good release?

To check this, heavily dust your lower vane with chalk. Shoot. Then check both your riser and your arrow rest to see if either has telltale chalk marks to indicate your trouble. A change to feathered fletching might alleviate these problems as feathers are much more forgiving than vanes. However, your setup is still borderline, and perhaps repositioning the arrow nock or changing your arrow rest is in order.

These signs could also be indicating that your release is faulty or inconsistent. Any deviation at release can cause a broadhead to plane, or flirt to right or left. This will be less noticeable in a three- or five-bladed broadhead, more easily detected on four-blade heads, and accentuated in those with two-blade inserts.

Opinions vary on how broadhead blades should be aligned on the shaft in relation to the horizon. I prefer to mount a two-blade head horizontally in the hope that the weight distributed on each side of the shaft might tend to dampen any tendency to flirt either



**PROPER FITTING** of nocks is important in creating accurate arrows. The correct adhesives are required to ensure that all parts of an arrow are properly aligned—and that they stay that way. Without attention to such detail, results in the hunting field will never be completely satisfactory.

way. With three-blade heads, I prefer to have one blade vertical. With four or more, I have no preference. I'm not convinced it makes any difference one way or the other.

Another reason for poor performance after arrow heads have been switched might be traced to the adapter inserts. It must be assumed, from the close tolerance built into both aluminum and fiberglass shafts, that adapter inserts are mounted straight when they come from the factory. Even when replacing them, it is almost impossible to get them out of alignment, providing they are the *right size* for the shaft into which you are gluing them. All that is required then is to screw the threaded end of the head into the adapter.

### **Placed Imperfectly**

With wooden shafts there is much more chance that heads can be placed imperfectly on the shafts. While it is true that shafts such as Bear's top grade cedar arrows come with converta-points, many wooden shafts come with only the fletching attached and must be cut to proper size. The cut end is then tapered to accept broadheads designed for such use. Any imperfection in this tapering will be magnified in placement of the head. It follows that equal care must be given to placement of arrow nocks. This writer long ago ruled out the use of wooden shafts in favor

of more nearly perfect man-made materials when it comes to big game hunting. Wood splinters can produce secondary trauma in the event of a non-fatal hit and cause an animal further problems.

Unfortunately, many of us are quick to blame our tackle when the fault lies with us. Over the years I've encountered countless archers who have spent small fortunes in trading and buying new tackle in an effort to find something they can shoot well. Most of the problems were psychological or just a basic inability to master the bow and arrow. With properly tuned tackle, there is no reason why broadheads should be any more difficult to shoot than field points. So, it is important before making any drastic equipment changes to ensure that the fault doesn't lie with the individual.

Prior to making any change, you should have an experienced archer check your shooting form. On several occasions I've found problems I was experiencing to be caused by me, not by what I was shooting. But any time you change any bow accessory or arrows and you are unable to function as formerly, it can be something you failed to install correctly or the replacement simply doesn't perform as well as the original.



There was a time I couldn't get new broadhead arrows to fly right. I discussed it with my supplier and he finally reminded me that my last arrow order had been for 20-18 aluminums, not the 20-16s I had been shooting. That small difference made it next to impossible to get good flight with the same broadhead.

Charts will steer you to what should be your proper arrow, based on your draw and the power of your bow at that draw. But, since these charts are based on averages, and shooting a bow is so individualistic, you may need an arrow slightly above or below that recommended on the chart. That is one reason why many who still shoot the longbow or the recurve seldom want someone else shooting their bows. Many feel that a bow that is overdrawn or an accidental "dry" release just might change the characteristics of the bow for its owner. Whether these feelings are valid or not, it is not considered good manners to draw or shoot another's bow without express permission.

Most all of the preceding are reasons to patronize your local archery shop. If not, be prepared to later pay the local



**THERE IS A considerable difference between the fletching needed to guide a broadhead (top) and that used for target arrows. Note that the former is much longer than the latter, and also of different profile.**

expert for his time to put you and your bow in tune. Discount houses will be pleased to sell you tackle, but the average one will provide little else.

Gary Shingler, who assisted with photographs for this column at his Black Crow Shop, is typical of many local archery dealers who support area clubs and its members, and provide expert service with their sales.

Many of them can explain everything written here — and in better detail.

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**The Lives of Bats**, by Wilfried Schober, Arco Publishing, Inc., 215 Park Ave. South, New York City 10003, 200 pp., \$24.95. Bats are perhaps the most misunderstood and needlessly feared group of animals. The objective of this book is to change these attitudes. The author presents what science has learned of these highly specialized mammals. A breakdown of the tremendous variety of bats found around the world is followed by chapters on where bats live, what they eat, echolocation, and many other aspects of their natural history.

**Wildlife Management on Your Land: The Practical Owner's Manual on How, What, When, and Why**, by Charles L. Cadieux, Stackpole Books, Cameron & Kelker Sts., Harrisburg, PA 17105, 320 pp., \$32.95 delivered (6% sales tax in PA). The author, who for 30 years worked as an information specialist for state and federal natural resource agencies, knows his subject and has the ability to explain wildlife management principles in easily understandable terms. Presented here, primarily for agriculturalists and other landowners, are proven techniques for incorporating wildlife and fish management practices into overall management plans. Arranged by species, chapters include a description of the animal, its natural history, and management practices to help it thrive. Over 100 photographs complement the text.

# The Sight Problem

By Don Lewis

Photos by Helen Lewis



**TOM LEETE, Coudersport, and George Daniel, Germania, examine each other's squirrel hunting equipment. Tom uses a 218 Bee with reduced loads, George an Anschutz 22.**

**“THE DAY I go to a scope will be the day I quit hunting,”** an old-time hunter told a couple of us young fellows. “My eyes have faded a bit, but I don’t want to strain them by trying to see through a tube of glass. If things get too bad, I’ll get a peep sight.”

“My brother just got a Mossberg 22 with a scope on it, and we’re killing rats twice as far as we did with open sights,” one of my friends blurted.

“Maybe so,” the veteran hunter answered. “But that doesn’t make a scope better for hunting. I’m told a scope is very hard to see through and one bump against a tree and it’s done for. I don’t want to spend my time try-

ing to protect a piece of glass. I’ll take the tough semi-buckhorn any day. It’s the best on the market and the fastest to use.”

This conversation took place a month or so after Adolf Hitler marched his armies into Poland in September 1939. Although much of the stove league conversation in our local country store was on the impending war, deer season was right around the corner, and rifles, cartridges and sights were the preferred topics.

There is no way of knowing who installed the first sighting system on a firearm. As the shoulder weapon became more accurate, it’s only reasonable to assume some hunter or gun builder realized a method was needed to guide the projectile. Consequently, a two-sight system was developed that still is popular today. Even in this modern era of advanced technology in optics, many rifle hunters prefer the open sight system consisting of a front and rear sight.

In all honesty, this method of guiding a bullet is by no means second class; man has used it for winning wars, expanding his territorial boundaries, and putting meat on the table. With such a nostalgic past and plenty of supporters today, perhaps I’m venturing far out on the proverbial limb by saying the V or U types (buckhorn or other types) are not the best sighting devices for the average hunter.

If the iron sight is not adequate, why is it installed on almost all factory rifles? That’s a good question, and the answer is simple: some method of aiming has to be installed in order to make the rifle a complete outfit. For the most part, after the rifle’s purchase the factory installed open sight will be replaced with a scope. That’s the reason



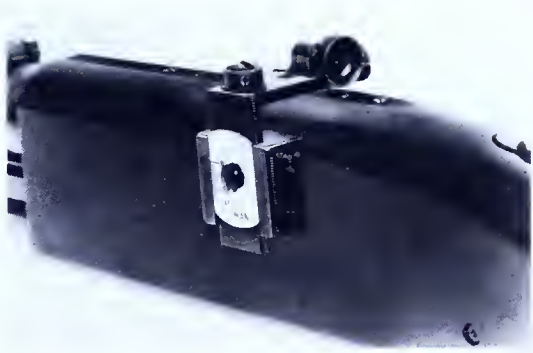
many factory sights do not show much in the way of quality or workmanship.

The drawback with the two-sight setup is that the human eye cannot focus perfectly on more than one object at a time, especially when they are at different distances from the eye. Normally, the conventional two-sight arrangement consists of a flat top rear and a post or bead front sight, separated by as much as two feet. When the target is added, there are three factors to worry about. Although the shooter thinks he sees all three in focus at the same time, his gaze is actually flicking back and forth from one to the other. There's no way the human eye can see all three in focus at the same time. As we grow older, it's even more difficult to use V-type sights.

Another disadvantage in many iron sight setups is the lack of windage adjustment. Most rear sights have a ramp that permits elevation changes, but the majority of rear sights have to be moved by force to correct a windage problem. That's difficult even on the range, and an impossibility in the field.

### Major Step

The advent of the peep or receiver rear sight was a major step forward. The receiver sight gets its name from the fact that it is located on the receiver of the rifle very close to the shooter's eye. It's really a simple device containing a disc with a hole through it. The advantage of the receiver sight is that in looking through the aperture the eye does not focus on the rear sight as it does with a U or V sight. In reality, the eye merely looks through the hole in the disc. The shooter's eye focuses on the front sight and the target. Since the front sight is farther from the eye



**METALLIC SIGHTS** have their place in the hunter's scheme of things. Above is a Lyman receiver sight, fully adjustable for windage and elevation; below is a Williams 5D with "foolproof" adjustments made with a screwdriver. The disc in the Lyman sight can be removed, as shown in the Williams, to make rapid sighting easy.



(which puts it more nearly in focus with the target), it is easier to flick the gaze from the front sight to the target.

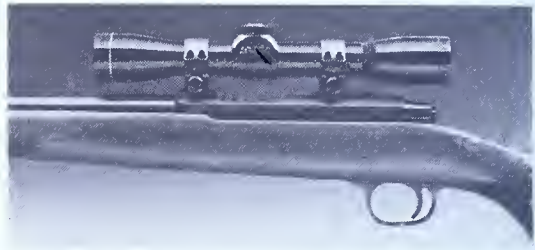
Another advantage is the tendency for the eye to automatically center the front bead in the aperture. This practically allows the shooter to ignore the rear sight, which in turn eliminates one of the three factors involved with the V- or U-type sight setup. In other words, the peep sight eliminates one-third of the problems of the conventional iron sight system.

A lot of shooters are apprehensive when using the receiver sight for the first time. Since the sight is within several inches of the eye, a very large field of view can be seen. I can understand the hunter's apprehension since it does seem reasonable the front sight





**M77 RUGER, above, comes factory-equipped with the open sights that some hunters—particularly old-timers—still prefer for fast use at close range. It can't be denied they do the job under certain conditions. At right is Leupold's new 4x Compact RF Special on M77/22 Ruger, an unbeatable combination in gloomy squirrel woods. This scope is small and light, but gives a brilliantly clear field.**



will never center in such a large area. This is not the case. If you pull a U-type sight very close to the eye, the same large area will be seen, except at the bottom where the sight itself blocks the view. In fact, if you rest the rifle on sandbags and align the front bead through the aperture at about 50 yards and then move the eye to the edge of the hole, you will notice only a slight movement of the front sight on the target. Your shot would still be in the fatal area at woods ranges on animals the size of whitetail deer and black bear.

When I was involved in gunsmithing, I often was asked what size the aperture should be. I recall one fellow who wanted only a pin-size opening in his disc. He felt the smaller the opening, the more accurately he could shoot. There is some merit in that on the range, but the size of the opening is not all that important, especially on the big game rifle. In dark woods, you'll be better off with a large opening. I have made openings up to  $\frac{5}{32}$  of an inch.

A major advantage with the receiver sight is seeing an unobstructed area around the front sight. If the hole size is very small, the field of view will be hazy and will be a definite liability in early morning and late evening. Don't worry about the size of the hole in the

disc. Competitive shooters swear by the small aperture, but they're in a different ball game than the hunter. Don't make the mistake of using a small aperture disc in the big game woods.

Over the 20 years I have written this column, a good bit of space has been given to the telescopic sight. In my opinion, the rifle scope is in a class by itself as a sighting device. Today's product is vastly different from the scopes of the pre-World War II era. Back then, fogging was a constant menace, and the lack of coating on each air-to-glass surface filled the scope with flares and reflections. All that has been corrected, and any high quality scope on the market now will give years of dependable service.

### Wrong Approach

Scope magnification is a question that plagues many hunters. There is a strong tendency among new scope users to go all out for power, but that's the wrong approach. Power is not the sole requisite for selecting a big game scope. Don't buy more power than you need. For instance, mounting a 4-12x on a 32 Winchester Special is spending extra money for nothing. A straight 2½x or 4x would be a wiser choice, both money-wise and in bulk and weight.

From long association with rifle scopes, I am convinced the 2-7x is adequate for all big game in the Keystone State. I like the 2-7x because it is relatively compact and light in weight. The



lower powers are a plus when shooting conditions are poor, and powers from 5x to 7x take the guesswork out of a long shot.

The hunter who uses his scope as a combination outfit for varmint and big game will benefit by going to a 3-9x or even the 4-12x. These scopes weigh a little more and are longer. I might add that *it's a bad practice to use the scope for identifying the target*. I feel very uncomfortable when another hunter "checks me out" with his scope. The scope is not supposed to replace the binocular in this sense.

Many high quality scopes are available today. High price does not always guarantee high quality, but good optics are expensive to make. Stay a mile away from bargain basement prices, and make certain your new purchase can be repaired in this country. Unfortunately, it's next to impossible to really check a scope out at the sales counter. Even poor optics can look bright and clear when new. Time is the real test for any optic. Lens cementing and coating are complex and expensive procedures. An inferior optic won't stand the test of time. Hard use and exposure to the elements will take the life out of a poor optic in a few years. The good ones perform well for decades.

I have written often about the importance of having a scope mounted properly for its user. This is more important

than most scope users realize. If the eye relief is not set correctly for a hunter wearing a hunting coat, it's almost certain he will not find his target in the excitement of the hunt. The same goes for eye focus; it's imperative to adjust it for the person using the scope. No one can do either of these operations for you.



**NIKON** has long been known for its outstanding cameras; recently it introduced two rifle scopes, a 4x and this 3-9x. Quality is tops here, too.

Every new scope user should spend time just looking through the optic. A scope that is mounted properly for its user is as easy to see through as a window.

Selecting any type of sight is a personal thing. Choose what you feel is best for you. Let me just say that the older you get, the more you need a scope. If you make this choice, get it mounted by a competent gunsmith and fire several boxes of ammo on the range learning how to use it. It will pay off a hundred times over when a rack appears 100 yards away.

---

## Potter County Antlerless License Information

In accord with Pennsylvania Game Commission action, the county treasurer of Potter County has been removed as a hunting license issuing agent. Consequently, no hunting licenses, antlerless licenses included, will be issued by him. The Game Commission will conduct and supervise drawings for the issuance of Potter County antlerless deer licenses on Wednesday, October 9, 1985 in the courthouse. Persons interested in applying for an antlerless deer license in Potter County should mail their applications to: Pennsylvania Game Commission, P.O. Box 662, Coudersport, PA 16915. Applicants interested in this county should black out "County Treasurer" and "County" on the official envelope and fill in the address above. Remittance for a license in Potter County must be made payable to the Pennsylvania Game Commission, NOT to the county treasurer. Applications and/or requests for special antlerless deer licenses for this county in the form of Military and Landowner Antlerless Deer Licenses must be mailed to the aforementioned Pennsylvania Game Commission addresses.

# *In the wind*

bob mitchell



The DuPont Company recently presented the U.S. Department of the Interior with a \$50,000 grant to support the bald eagle breeding program at Patuxent Wildlife Research Center. Offspring produced by the captive flock maintained at the center are used to supplement wild populations through various reintroduction projects. For example, since 1979 eaglets hatched at this federal facility have been placed in nests at Pymatuning to be raised by foster parents. Captive pairs maintained at Patuxent have increased from 8 in 1982 to 14 this year, and this year a record 18 eaglets were produced. Another reason for this year's record production is that instead of using artificial incubators to hatch the eagle eggs, scientists placed the eggs under barnyard chickens. "It's a clear case of Mother Nature beating out modern technology," reports one researcher.

**A comparison between 1983 and 1984 figures indicates the Pennsylvania Bureau of State Park's bluebird trails program has increased in every respect. The number of parks with trails increased from 37 to 44, and the number of boxes used by bluebirds went from 174 to 218, and the number of bluebirds fledged increased from 624 to 705.**

This past fall biologists in Virginia went back to an area where they had released some Delmarva fox squirrels in 1982 to check if the stocking effort was succeeding. During a two-week trapping period, five fox squirrels were captured. Two, a male and a female, were among those originally stocked. Another, a male, had been born there in 1983, and the other two, both females, were born last year.

Organized ranchers afraid of losing grazing privileges on national lands (for which they are charged \$1.35 per month per head of livestock) have blocked two wildlife reintroduction attempts. According to the WMI an attempt to bring bighorn sheep back to Yosemite National Park was thwarted by sheep growers because the only areas suitable for bighorn winter range is being used for domestic sheep. And a project to reintroduce elk to the Humboldt National Forest in Idaho and Nevada was blocked by ranchers who are afraid elk would damage hay on private lands, and outcompete domestic stock on public lands. Livestock consume 91 percent of the forage on public land in Idaho, and 94 percent in Nevada.

**According to historical records the last native moose in New York was taken in 1861, but biologists there think the species is returning, based on the number of sightings in the northern part of the state over the past several years.**

During the 1960s, the Arkansas Fish and Game Commission received 254 black bears from Minnesota and Manitoba for a restoration project. Today, they have between 1500 and 2000 bears, and last year 31 were taken by hunters. Bears are expanding their range and they are being seen where they haven't been found in 100 years. One particular bear was a 143-pound adult female trapped in Minnesota and released in Arkansas in 1968. It was killed last fall, 13 miles from its release site. It was at least 17 years old and weighed 330 pounds when killed. The population is in jeopardy, however. It's been estimated that each year 300 bears are killed illegally or by landowners who won't tolerate their presence.

Last spring, the Virginia Commission of Game and Inland Fisheries provided the North Carolina Wildlife Resources Commission with three eaglets for their hacking project. So many young were able to be given to North Carolina because Virginia just experienced the best nesting season in the past 15 years. On a sorry note, however, Virginia biologists found two dead eagles, an adult and a nestling. Both, they suspect, died as a result of eating pigeons which had eaten treated corn or other poisons.





Make check or money order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**

Dept. AR

P.O. Box 1567

Harrisburg, PA 17105-1567

Shown above is the fourth in the Game Commission's annual series of embroidered patches and decals offered through the Working Together for Wildlife program. Funds derived from the sale of these and other selected items are used specifically for non-game research and management projects. Bald eagles, otters, ospreys and eastern bluebirds are just a few of the animals being helped in Pennsylvania, thanks to the people who've been supporting this program. This year's patch is priced at \$3, and the decal at \$1, delivered.



Make Check or Money Order  
payable to:

**PENNSYLVANIA  
GAME COMMISSION**  
Dept. AR, P.O. Box 1567  
Harrisburg, PA 17105-1567

*Shown here are seven of the publications now available from the Game Commission. All prices include tax, handling and postage. When ordering ask for a complete list of the Game Commission's free and paid publications.*

- Birds of Pennsylvania, *By James and Lillian Wakeley* .....\$10
- The Wingless Crow, *by Charles Fergus* .....\$10
- Mammals of Pennsylvania, *by J. Kenneth Douthett, et al* .....\$ 4
- Gone for the Day, *by Ned Smith*.....\$ 4
- Pennsylvania Wild Game Cookbook .....\$ 4
- Pennsylvania Trapping Manual, *by Paul Faylor* .....\$ 3
- Woodlands and Wildlife.....\$ 2



# PENNSYLVANIA GAME NEWS

OCTOBER, 1985

60 CENTS



JOHN SIDELINGER

©1983





Since its inception in 1979, the Game Commission's Working Together for Wildlife program has become increasingly popular. Through the sale of collectible decals, embroidered patches and fine art prints, research and management projects specifically for nongame wildlife are being conducted. Ospreys, bluebirds, bald eagles and river otters are just four of the many species being helped because of WTFW. The Ned Smith fine art prints have proven especially popular. *Big Woods Bobcat* and *Dutch Country Bluebirds* have already sold out, and less than 60 *River Otters* remain. Orders for this signed and numbered print, image size 15 x 22½ inches, are being filled on a first-come, first-served basis while the supply lasts. Prints are \$125 each, delivered; framed prints are available for an additional \$97.50. Order from Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doeblar, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starnner**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**Betsy Maugans**  
Editorial Assistant  
**Libby Williams**  
Circulation

**FEATURES**

<b>Try The Funnel Effect For Deer</b> .....	3
By Robert E. Tallman, Jr.	
<b>The Grouse of Braddock Run</b> .....	6
By Paul L. Wright	
<b>Managing For Wildlife</b> .....	13
By Bob Mitchell	
<b>Shoreline Scouting</b> .....	20
By Joseph Kosack	
<b>The Questionnaire Results Are In</b> .....	24
By Bob Mitchell	

**NEWS**

<b>Books in Brief</b> .....	12, 39, 48
<b>Field Notes</b> .....	30
<b>Conservation News</b> .....	35
By Ted Godshall	
<b>25-Year Club</b> .....	40
<b>In the Wind</b> .....	64
By Bob Mitchell	

**COLUMNS**

<b>GAMEcooking Tips</b> .....	42
By Carol Vance Wary	
<b>Young Artists Page</b> .....	43
<b>Another View</b> .....	44
By Linda Steiner	
<b>Outdoor Wildlife Learning</b> .....	46
By Bill Einsig	
<b>DGP Diary</b> .....	49
By Joe Carlos	
<b>Thornapples</b> .....	52
By Chuck Fergus	
<b>All-Day Deer Hunts (Archery)</b> .....	57
By Keith C. Schuyler	
<b>Thoughts on Shotgun Patterns (Guns)</b> ....	60
By Don Lewis	

**COVER PAINTING BY JOHN SIDELINGER**  
(Cover Story on page 23)

## Against the Grain

**B**AITING IS illegal and unethical. The Game Commission considers it a serious crime, and sportsmen should too.

The use of small grains, salt, fruit, decomposing animal remains and other food to acclimatize or attract game to a specific area so it can be killed under the guise of hunting runs contrary to all the rules of sportsmanship and fair chase. It's unfair to wildlife and it's unfair to hunters.

District game protectors and their deputies place a high priority on apprehending those who resort to such unscrupulous tactics. Furthermore, emphasizing just how much importance is placed on curbing this practice, state lawmakers have incorporated provisions into the proposed codification of the Game Law that will control the feeding of wildlife during the autumn months. Far too many individuals keep camp feeders well stocked through fall and early winter, the time of year when natural foods are actually most plentiful, only to leave the cupboards bare during winter's harshest months. What are the motives? Is this done for wildlife?

A lot of publicity has been given to bear baiting violations in recent years, but deer, turkeys, waterfowl and small game are also baited into waiting guns.

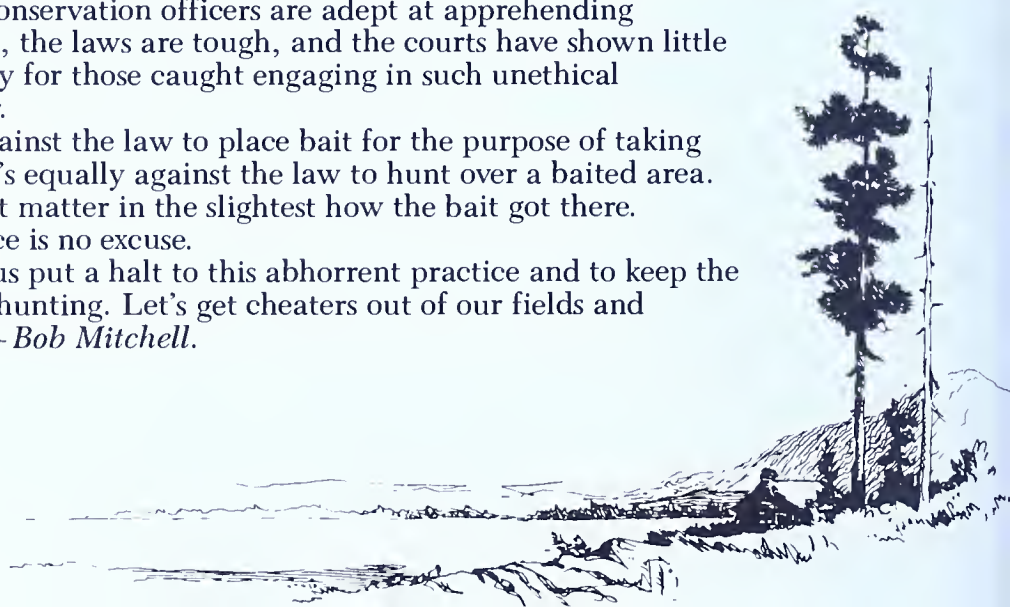
Hunters should be appalled at this practice. Those who bait wildlife are stealing from sportsmen and they're tarnishing the image of our sport, something we can ill afford. And speaking of sport, this particular violation, perhaps more than most others, is one which hunters, through the Game Commission's SPORT program, can help eliminate. Be suspicious. Apples don't fall from hemlocks, corn doesn't naturally occur under oak trees, and salt blocks don't grow like mushrooms from a forest floor.

If you should hear of or encounter a suspected baiting incident, call the district game protector. He will be glad to hear from you. And if you should discover a baiting violation on any of the opening days of the seasons, when conservation officers are most likely afield, call the nearest regional office; the numbers are on page 8 of the Hunting and Trapping Digest.

Our conservation officers are adept at apprehending violators, the laws are tough, and the courts have shown little sympathy for those caught engaging in such unethical behavior.

It's against the law to place bait for the purpose of taking game. It's equally against the law to hunt over a baited area. It doesn't matter in the slightest how the bait got there. Ignorance is no excuse.

Help us put a halt to this abhorrent practice and to keep the sport in hunting. Let's get cheaters out of our fields and forests. — *Bob Mitchell.*







**I ANALYZED WHERE MOST of our deer were taken. It was where natural barriers tended to funnel them through a relatively small area.**

## ***Try The Funnel Effect For Deer***

**By Robert E. Tallman Jr.**

**WHAT IN THE** world does a funnel have to do with deer hunting, you ask.

Is there any one answer which links the perennially successful hunters? Aside from the usual pre-season scouting, keen observational abilities, extra alertness and perhaps above average shooting ability of these hunters, I believe the "funnel effect" may be the one common link.

I am 36 years old and have taken a buck every year for as long as I can remember. I have constantly been asked what is my secret or how can I be so lucky?

I was fortunate enough to grow up in a family where hunting is as tradi-

tional as apple pie. My father, brother, 17-year-old son and I constantly relive and analyze every hunting day. I will never forget my grandfather's total domination of "us youngsters" with his hunting stories.

I belong to a hunting camp in Tioga County that keeps hunting as its major theme year around. It started as a poor man's camp, over thirty years ago, and we have chosen to keep it that way. This way our business at hand is always hunting and the camaraderie is excellent. Our camp is constantly filled with dinner table analysis of deer hunting. A question I always had as a young hunter was, "Why do the old-timers always get their deer first?"



**FOR LATE afternoon I choose a funnel leading from the high bedding areas to the normal feeding areas. Most areas have natural barriers. I take advantage of these.**

I remember one day a few years back. I was following a long stretch of rimrock and peeking over the edge every 50 yards or so, when I noticed the rimrock was coming to an end with a thick band of young beech trees leading through the swale that came all the way to the top from the creek below. I was thinking this should be a great place to stand, when out of the corner of my eye I caught a flicker of movement. I slowly turned, only to see three deer hightailing it out of sight. I threw my gun up as the last deer, a racked buck, disappeared from sight.

I didn't feel I had spooked those deer and the wind was right, so I picked a strategically located tree and sat to eat my lunch. I had just poured a cup of coffee when I saw the buck sneaking along the top of the lower set of rimrocks, about 75 yards away. I slowly put down my coffee and raised my rifle, which I always have across my lap when sitting, and held for a small opening. He stepped into the opening and I quickly held behind the shoulder and squeezed the trigger. He ran a few yards and dropped, and I watched for a short time to assure he was down to stay.

As I walked toward him I noticed fresh deer tracks everywhere. While

dressing out the fat 5-pointer it occurred to me that all these tracks were made by deer which had been funneled through the swale by the natural barriers formed by the high rimrocks at the top and the creek below. This aroused my curiosity, and after a little scouting I noticed these tracks came from every direction and that they came together at the swale because of the natural lay of the land.

I began analyzing where I had taken my bucks and where most of our deer, in camp, were taken in recent years. A pattern began to form. Most deer were taken where natural barriers tended to funnel them through a relatively small area, easily covered by one man. For example, the high stretch of rimrock that has a break in it, as described earlier. Or the head of a hollow that meets a thick stretch of beech brush or scrub oak. The most common was a ridge of relatively open timber with a band of beech brush or scrub oak near or on the top. Deer prefer thick woods in their daily travels and will go out of their way to stay in the dense cover, especially when being pushed.

In other words, you can increase your odds if you examine your hunting area and look for the natural funnels. If hunting unfamiliar terrain, a topographical map will reveal these funnel areas. Some thorough preseason scouting will enable you to choose the best area.

### Two or More Funnels

I try to pick the narrowest part of the funnel for my stand. The best areas are where two or more funnels come together. Think about your most successful deer crossings and invariably these will be where two or more funnels come together.

How to choose the best funnel is perhaps the most important trick. You will want to pick the most used one for each time of day, ie, early morning, midday and late afternoon. For example, a funnel at the bottom of a mountain with its narrowest point at the bottom will be better for deer which are moving



down the mountain, which they normally do in late afternoon. To sit there in the morning when deer are moving up the mountain from lower feeding areas could prove futile.

I usually choose from three to five different funnel areas to watch during the course of a day, because I am not a patient hunter. I don't have the patience to sit or stand in one place all day. Also, I feel this gives me the advantage of accommodating to the deer as they move uphill in the morning and down in the evening.

#### Four Categories

Each morning I check weather conditions, wind direction and known hunter pressure before deciding on the best funnel areas to hunt during that day. I have broken most of my funnel areas into four categories: morning, midday, late afternoon, and hunter pressure funnels. Morning funnels lead from feeding areas to bedding areas. Midday hunting high area funnels or man pressure funnels prove best. Most bucks choose a high knoll with several escape routes for their bedding areas. I like to analyze where the most hunter pressure is going to be and choose a high area funnel leading from the pressure to a more remote area. Wind direction is the most important determining factor as deer will flee from the pressure into the wind, or at least in a quartering direction.

For late afternoon I choose a funnel leading from the high bedding areas to the normal feeding areas. Many hunters stand at feeding areas only to have their buck taken by another hunter before it gets to them. Invariably, the successful hunter had knowingly or luckily chosen a natural funnel leading to the feeding area.

Most deer hunting areas have natural

## New Hunters . . . Read This

Every first-time hunter, regardless of age, must complete a hunter education course before he can purchase a hunting license. Also, a hunting license is needed to apply for a goose blind at one of the Game Commission's controlled waterfowl hunting areas, for a bear license, and for an antlerless deer license. These applications must be submitted in early fall; therefore, it is imperative that beginning hunters complete a course and obtain their licenses early enough to meet application deadlines. Don't delay. For information on dates and locations of courses, check your local newspaper, sportsmen's club, license issuing agent, district game protector, or local deputy game protector.

barriers—a deep stream, a beaver pond, rimrocks, sheer cliffs, etc. The best funnels I have found are those where the narrowest part of the funnel happens to be the thickest-grown part.

A lot of hunters will say I am just trail watching, which is partly true. Most trails are made by a lot of deer, mostly does and young deer moving to and from feeding areas. The bucks join these trails at various points, probably at the more dense points. Most deer trails pass through several natural funnels, in their meandering, and it is my contention that the odds will be much greater in your favor if you choose a natural funnel area along that trail.

Using funnels for your stands, may narrow the odds enough to make you one of the perennially successful hunters.

## Never Get Something for Nothing

The rich soil in the Mississippi River Delta is lifted from a drainage area over all or parts of 31 states and two Canadian provinces.

BOB  
SOPCHICK





# *The Grouse of Braddock Run*

By Paul L. Wright

I HAD NEVER been to Addison before, but anyone with an inkling of gunning instinct could tell this was grouse country. At almost every turn in the country road, better looking grouse cover came into view. I had come to the Youghiogheny River drainage at the invitation of Frank Wright Springer, grouse hunter emeritus of the area. Although Frank no longer lives in Addison, he for years has returned annually to hunt grouse. Indeed, Frank Springer has hunted these mountain partridge for most of his 73 years, and he is still able to get around the steep hillsides better than a lot of men half his age.

Addison is a delightful little village located in the Southwestern section of the state near the juncture of Pennsylvania, West Virginia, and Maryland. Our gunning headquarters was just a mile and a half west of Addison on the 1600-acre estate of Frank's lifelong friends Edgar (everyone calls him Pete) and Jean Augustine. The Augustines' property has been in their family for generations, having been acquired in colonial days by a land grant from the king.

In keeping with the hunt tradition, I arrived in Addison on Sunday afternoon so I would be ready for a full day of gunning on Monday. There were four of us in the hunting party, Frank's son-in-law, Dr. George Stuart; Bill Dominick, a friend of George's; and myself. George is a periodontist. Bill is in the plastics industry. Frank is a retired river boat captain, and I work in radio broadcasting.

For many of us, upland bird hunting and pointing dogs are such integral parts of one another it is impossible to think of them separately. We had two setters with us, my tri-colored male Rocky and Frank's blue belton, Dixie. Rocky is of toronado breeding. This

famous bloodline has won its share of field trials, but running the open woods of a trial course is far different from gunning grouse in Pennsylvania coverts.

All of my dogs have been hunted almost exclusively on bobwhite quail in the South. I was anxious to see how Rocky would handle grouse. Dixie was about a year younger than Rocky, so Frank and I thought it best to hunt the dogs separately. With four grouse hunters in camp, that made the hunting parties just the size I prefer.

Having fed the dogs and stowed our gear in Pete's newly completed two-story hunting cabin, we were all ready to hear about the good old days in the mountains. From 1902 to 1938, Cliff Springer, Frank's father, owned a famous hotel in Somerfield, which he called the Youghiogheny House. Located along the banks of the famous river of that name, the Youghiogheny House was built in 1818 and originally used as a way station for stage coaches. In the mid 1930s, a flood control dam was built across the Youghiogheny River at Confluence, which resulted in the inundation of the town of Somerfield. The Youghiogheny House was razed before the Youghiogheny River Lake was flooded, and so is lost to us today.

## Third Cup

On about the third cup of coffee, Frank told us that he felt Braddock Run was the best grouse covert around Addison. When there were no other grouse in the country, Braddock Run always seemed to hold a huntable population. It's little wonder that this covert provides such splendid hunting, as the hills ascend from the stream at what looks to be a 75-degree incline. Frank didn't tell us that on Sunday night, however. Nor did he tell us that

grapevine thickets laced large areas of the hillsides. But such is the stuff great grouse hunting is made of.

The only negative of my hunt was that I wouldn't be able to stay in Addison the whole week. Prior commitments were going to take me away from the coverts for at least two days, probably Tuesday and Friday. But the next day was Monday, and I would see the grouse cover Frank Wright Springer had told me so much about.

### Out a Lane

It was 9 o'clock when we snapped the setters onto leads and started out a lane to an old sawmill that Pete Augustine no longer uses. Bill Dominick, Rocky, and I were going to hunt from the sawmill down through the thorn thickets and work our way around to the peach orchard covert. Frank and his son-in-law would hunt along another run. We would meet at the peach orchard for lunch.

Rocky pulled me toward the thorn covert. I "whoaed" and styled him, put the lead in my shooting vest, and with two blasts on the whistle sent him off on his very first grouse hunt.

The two-year-old setter had been doing excellent work on quail. He would retrieve to hand any bird I shot. Still, my mind was full of questions about his performance in the grouse woods. Rocky was used to running the edges, searching for bobwhites. There were no obvious edges to these thorn thickets. Would he be able to work the scent? Apprehension is nothing new to bird dog trainers, however. I just had to remind myself that the blood which coursed through his veins was the result of generations of selective breeding intended to make him do one thing—find birds. Every dog handler knows the moment of truth, I'm sure, when he must trust the dog to do his job.

We were barely 100 yards into the thicket when Bill yelled, "Mark." The grouse escaped without showing itself to either Bill or me. Rocky hit the scent and went birdie. Oddly, he seemed

more intense as he drank in the grouse odor than I had ever seen him before. He knew the bird was gone, but he wanted to linger in the scent. He even ignored my first two whistle blasts, and I had to speak sharply to break his trance.

Two more grouse thundered away without offering a shot. The thorns were opening up now and in the clearings were head-high stands of green-briar and blackberry bushes. Deer had made game trails through the briar patches, but penetration was still difficult. I sent Bill to the uphill side and said Rocky and I would fight our way through the middle. The setter had little trouble, but I was getting stuck by every barb on the canes I was pushing past.

More concerned about the bloody scratches that were appearing on my face and neck, I lost track of Rocky for a time. Presently, there was a strange silence. The significance of it didn't hit me until Bill called, "What's Rocky doing?" That was it! Rocky's bell was



**THE BIRD BORE** off toward Bill. One shot, then another, and another. Bill's whistle and, "Here, Rocky," told the story. The grouse had been weaving through the thicket for Bill's first two shots. The third centered it.



not ringing. Ordinarily, I don't bell the setter, and I was unaccustomed to listening intently for the tinkling sound.

Another 30 yards, and I made out Rocky's black-and-white body among the blackberry canes. I eased to him as quietly as possible. I wanted this moment to be etched into my consciousness. It was a handsome point, all that any dog man could ask. The brown, black and white of his head were framed in a triangle of greenbriar. The vertical blackberry canes highlighted the squareness of his muzzle, his head was high, and his nostrils quivered. The feathers of his ruler-straight tail waved in the breeze. This was how every upland hunter should be introduced to grouse shooting with a pointing dog.

The bird bore off toward Bill. One shot, then another, and another. Bill's whistle and, "Here, Rocky," told the story. The grouse had been weaving through the thicket for Bill's first two shots. The third centered it.

Rocky had a little trouble retrieving his first grouse. Quail are much smaller. But after a few simple adjustments, he proudly brought his inaugural grouse to me. I must confess to a covetous thought as I handed the bird to Bill. Ideally, as Rocky's owner/trainer, I would have had a shot at his first grouse. But gunning is not always ideal.

I sent the setter on. Rocky's hunting desire had reached a frenzied pitch. He was now running to objectives, applying canine logic to the hunt, darting from one greenbriar copse to another.

As he passed one thicket, a grouse flushed from the far side and passed overhead. From Rocky's reaction, or lack of it, I felt sure he didn't have any idea the bird was there, so I whirled and shot. The grouse tumbled. The weight in my game vest was welcome. Still, I hadn't shot over Rocky's point.

The peach orchard turned out to be a plateau. There was a steep hill on one side and a gentle rise on the other. Years before, the Augustines had

OCTOBER, 1985

planted peach trees on this flat top, but evidence of the fruit trees had long since gone. Instead, ideal grouse cover dominated the area. Hardwoods dripping with wild grapevines always excite a partridge hunter. After lunch, we moved three grouse from the covert, but had no shooting.

Tuesday, I didn't hunt. Bill, George, and Frank hunted Braddock Run for the first time. Bill limited out quickly, his two birds coming in the morning. Frank was resting his young setter Dixie, so the trio was hunting without a dog.

### Full of Praise

All three gunners were full of praise for the Braddock Run covert, saying they moved an incredible number of birds. I was looking forward to getting into the area.

My Tuesday appointments took me near my parents' home in the western part of the state. I thought it would be nice to hunt my boyhood haunts with Rocky, so I stayed over Tuesday night and hunted familiar grouse woods Wednesday morning. The two-hour hunt produced one bird which I flushed. Rocky made a handsome retrieve, presenting me with an unruffled grouse.

After the brief morning hunt, I loaded Rocky into my dog trailer and drove back to Addison. Just as I pulled into the Addison Hilton, as we came to call the fine hemlock structure that Pete Augustine called a mere "hunting cabin," my three companions were leaving for the field. Bill was concerned about a grouse he felt he wounded the day before while gunning Braddock Run. We generally don't hunt an area two consecutive days. In fact, we tried to rest coverts three days before hunting them again. But under the circumstances, we decided to make a quick swing through Braddock Run to see if we could locate Bill's wounded grouse.

When we arrived at the run, Bill said: "Bring Rocky and follow me," and headed up the mountain. We



**THE TWO-HOUR hunt produced one bird which I flushed, and Rocky made a handsome retrieve, presenting me with an unruffled grouse. It was a moment of complete satisfaction that I'll long remember.**

climbed without benefit of switchbacks until Dominick told me he thought we were at the point where he had started following the contour the day before. Rocky was having no difficulty at all casting the steep hillside, but the loose rocks beneath the leaves had Bill and me struggling to keep our feet.

Just as Bill was telling me the surroundings were looking familiar, Rocky jammed into one of his heart-stopping points. "That's just where I thought the grouse fell yesterday," Bill said. As we approached the grapevine tangle, a grouse jumped from the thicket, trying to fly. Clearly, a wing had been damaged the day before. Try as he might, the bird could not take wing, so he did the next best thing . . . He ran down the mountainside.

All the while, my young setter was frozen on point. The dog was an excellent retriever, why was he ignoring my command to fetch? Half frustrated and half angry, I walked toward

Rocky, primed for a training session then and there. When I reached down to tap him on the side and release him from his point, a second grouse exploded from underfoot. I automatically swung on the bird. A puff of feathers told me I had him well centered.

It's funny how quickly our emotions change. An instant before, Rocky was the focus of my ire. Now, my chest swelled with pride at his fine bird work. As soon as I took my grouse from Rocky's mouth, he darted off down the mountain. Could he have seen the first grouse? He must have. The bird was attempting flight right in front of him. A moment later, I saw my tri-colored setter scrambling up the hillside with Bill's grouse.

We intended to hunt Braddock Run the next afternoon, so we dropped to a lower contour and made our way back to the beginning of the run. Rocky gave us three more glorious points on our way out. Each time, the bird flushed from the far side of a grapevine thicket, affording us no shooting. We hadn't been in the covert for fifteen minutes and we moved five different grouse.

### Last Day

Thursday was going to be my last day hunting in Addison. Frank wanted us to see another of his favorite gunning areas. This one was not on Augustine land, but located two miles away, north of U.S. 40. Called the "across-the-road-covert," Frank said it was fairly easy hunting and always had a good population of birds. We parked in a convenient pull-off and were still fumbling for shells when a grouse flushed from the thorny run . . . a good omen.

The run was bordered by a harvested cornfield. Rocky used the opportunity to stretch his legs. Reverting back to a quail dog, he took the edge. Watching him race some 200 yards to the front, George Stuart asked if he were running away. I assured George that Rocky would be back.



Soon the setter topped the hill and made a wide cast through the open field. There's enough field trialer in me to thrill to a dog running to the extreme, with high head and cracking tail. Rocky was proving to be that rare dog that runs to cover. In the grouse woods, he ranged from 50 to 75 yards, but in this open cornfield Rocky was pressing the horizon.

We came to an abandoned pasture overgrown with hawthorns and briars. Rocky was making game. Head high, he seemed to be walking a tightrope as he followed the invisible thread of scent. Mesmerized, I watched the setter ply his trade. His pace slowed and then stopped altogether as he stretched into a point near a greenbriar thicket. He was in front of me, so I moved to him. The partridge flushed to my right and crossed in front, giving me a station six, low house shot. My first barrel lacked the proper lead, so I swung through the bird again. At the second shot, the grouse folded. Rocky was off, breaking new ground quickly. Too quickly. I had to pick up the bird.

As we moved into the grapevine-laden hardwoods, Bill Dominick moved a grouse from one of the thickets. He made a perfect shot. I thought another bird might have flushed from the far side of the grapevines, and that proved to be the case. Less than 100 yards ahead, Bill routed the second bird from hiding and cleanly killed it with a straightaway shot.

The action had been slow for an hour when Bill called point by the thickest grapevine tangle we'd seen. Rocky's intensity told all that he knew the birds were there. When Bill and I were in position, we moved in. One grouse, two, then the third bird bore away, nothing more than a brown blur. Shooting was futile.

We had two more wild flushes. Both birds were from Rocky's "triple point." The across-the-road covert certainly had provided us a lot of action in a three-hour hunt.

After lunch, George and I went back to Braddock Run. We entered

the woods about where Bill and I had stopped the day before. Almost at once, we heard two grouse flush somewhere to the front. Both seemed to sail down the mountainside. In his enthusiasm, Rocky was reaching farther than I liked in such tight cover. He ignored my direction and whistling, so I called him to heel and made him stay there for a few torturous moments. The setter was whimpering pitifully by my side. When I could stand it no longer—and when I thought my point was made—I sent him ahead. Dog training manuals tell you that teaching the command "heel" is a way to have a mannerly dog. I've found it most useful in reminding a dog of his proper range.

### Just Starting

George Stuart is just starting his gunning career, and for the short time he has been hunting, he does remarkably well. This was George's first occasion to gun with a bird dog that actually pointed. As we dropped down the mountain to hunt the stream bottom, Rocky's bell again went silent. Both George and Rocky were off to the right, so I asked George what Rocky was doing. George replied: "Well, he's standing here all stiff with his tail straight up in the air."

"Sounds like a point," I told George. "I'll be right over."

Rocky's intensity had eased a little by the time I arrived, but only a dog trainer would know that. We moved in front of him but flushed no grouse. I tapped him on the head and he cantered forward. Forty yards more and he whirled into an eye-bulging point under some thorn trees. I had dropped down on one knee to watch him, and on hands and knees seemed to be the only way to approach this point. Getting a shot would be a small miracle. Sure enough, I was barely inside the perimeter of thorns when I saw a tail fan out 10 yards in front of Rocky. The grouse was gone in an instant. Still, I was eyewitness to a fine piece of dog work.

Legal shooting hours were rapidly drawing to a close, and so was my Addison hunt. George pushed through a briar patch on a creek bank and flushed a woodcock. He shot and missed as the bird crossed to my left. The under barrel of my Winchester 101 spoiled George's chance for a second shot. Sorry, George. That's how things go some days.

With less than a half-hour left in the day's hunt, I was urging Rocky forward, hoping for that one last point. Suddenly, there it was! Again in the thorns, but we might have a shot. The birds had seemed to be getting ner-

vous, so we tried to get to the points quietly. This one jumped while we were still out of range, but no matter. Rocky's finale is still in my memory.

We'd had an exceptional hunt. On our best day, our group moved 16 grouse for 22 flushes. Not only had I hunted some beautiful country and experienced fellowship with three fine sporting gentlemen, but my young setter also performed marvelously. He hasn't always done so, before or since. Everything about my Addison hunt was memorable, especially the grouse. What fine game birds, these grouse of Braddock Run. May it ever be so.

## Pennsylvanians Win NHF Day Prizes

SIXTEEN Pennsylvania students have won awards in the 1985 National Hunting and Fishing Day Poster Contest. Larry Green of Greenville won first place in the senior division and a \$500 U.S. Savings Bond. Bridgette Vetter of Mills, Matt Hollan of Johnstown, Dave Wagner of Whitehall and Ryan H. Speece of Altoona each won an honorable mention and \$75 U.S. Savings Bonds. Julie Wojcik of Aldenville, Faith Reichwein of Atglen, Jeff Wolf of Copley, Teresa Walter of Grove City, Al Drasovits of Whitehall, Gary Hoffman of Hollsopple, Kim Walsh of Oxford, Jean Franks of Tobyhanna, Elise Bortlik and Peter Griffin of Stroudsburg, and Cindy

Lohr of Lewisburg won Merit Awards and \$50 U.S. Savings Bonds. Ryan Speece's entry was sponsored by the Penn's Wood Council of the Boy Scouts of America. The remaining winners were sponsored through the Pennsylvania Federation of Sportsmen's Clubs.

Their posters were among thousands entered by students in local NHF Day Poster Contests sponsored by schools, youth groups, sportsmen's clubs, and civic and conservation organizations across the country. Entries were judged on how well the students illustrated the contest theme, "Why Wildlife Needs America's Sportsmen," artistic merit, and originality.

## *Books in Brief . . .*

**Birds of North America: Eastern Region**, by John Bull, Edith Bull, Gerald Gold, and Pieter Prall, Macmillan Publishing Co., 866 Third Ave., NYC 10022, 157 pp., \$16.95 hardcover, \$9.95 softbound. The first in a series of Macmillan field guides designed specifically for aspiring naturalists. Birds are grouped not just by species, but also by color and shape—the two characteristics first noted by novice birdwatchers. This guide is directed particularly to those who want to identify birds seen in the yard, and along highways and waterways. The introduction covers the basics of bird identification and use of the guide. As this guide covers only the 250 most commonly seen birds, of the 600 found in the region, it won't satisfy the needs of more experienced birders, but it's a good guide for those wanting to begin learning about the birds around them.



# Managing For Wildlife

By Bob Mitchell

Assistant Editor  
GAME NEWS

**A**S SOON AS the Game Commission received legislative authorization to purchase land, the agency began acquiring tracts in earnest. Management policies and activities, however, weren't developed and implemented at the same rate. For the most part, habitat development decisions were left to the discretion of local managers. There were no overall governing policies or objectives. State Game Lands were not always managed in the most efficient manner. Such is not the case today.

In 1969, the Commission adopted formal land management guidelines based on proven wildlife management principles, and directed the land management staff to prepare a detailed, long-term management plan for each State Game Lands.

With 253 tracts throughout the state at that time, this was a major undertaking. Size, location, climate, soil, terrain, and habitat descriptions are just some of the factors that had to be considered for the development of each Game Lands plan.

Land managers were charged with assembling this information for all

Game Lands in their groups. Lists of all wildlife species known to exist on the tract, and those which could exist under proper management, were also included. So were all important historical sites and geologic formations. Details on how the needs of users were to be met had to be included. Aerial photos and topographic and soil maps were assembled to complement each report.

## Essentially Complete

Today, this endeavor is essentially complete. A management plan exists for almost every one of the 276 State Game Lands. Much time and effort went into the development of these plans, including a great deal of assistance from the Soil Conservation Service in each county. It was time and money well invested. The agency now

**STATE GAME LANDS are managed for wildlife. By developing and maintaining a variety of habitats on these lands, the year-round food and cover needs are provided for game and nongame.**

The Pennsylvania Game Commission's land acquisition program was covered last month. Using some recent acquisitions as examples, the types of tracts desired and purchasing strategies were explained. The subject of in-lieu of tax payments made to local municipalities was covered also, along with the public recreation opportunities these lands offer. This month, habitat management policies are explained, emphasizing how these policies benefit wildlife.



has a complete description of each tract, and specified procedures on how each is to be developed and maintained.

State Game Lands are for wildlife. Therefore, the paramount objective of each management plan is to optimize conditions for wildlife. Land is not managed exclusively for deer, grouse, or other game or furbearers. In an overall sense, all animals receive equal consideration in land management plans.

Wildlife management is habitat management. Providing for the greatest variety of wildlife is accomplished by providing the greatest variety of habitats. Maximum numbers of wildlife are obtained by interspersing habitat types among one another.

Wildlife is related to habitat in two fundamental ways. First, most species need different habitat types both daily and seasonally. Grouse, for instance, are considered birds of regenerating forests, the seedling and sapling stages. In spring and summer, grouse need open areas where the young can glean insects from lush herbaceous plants. In winter, they do best in coniferous cover where they can find sanc-

tuary from winter winds and hungry predators. Years of research have determined that maximum numbers of grouse are sustained where all of these habitat types are available within one square mile.

Secondly, many species thrive only in specific habitat types. Goldfinches and upland plovers, as examples, nest only in open areas—fields and meadows. Other kinds of wildlife live in hedgerows and reverting farmlands. The same is true for forest wildlife.

During the century it takes a forest to grow into mature timber it provides homes for different animals in its different stages of growth as the years go by. These differences are subtle—often too subtle for an untrained observer to notice. Nevertheless, the changes are real.

Immediately after a forest is cut, the new seedlings and remaining slash attract common yellowthroats, gray catbirds, rufous-sided towhees and many other birds. As the new forest develops, these species gradually give way to black-and-white warblers, chestnut-sided warblers, brown thrashers, and others. As the forest further matures, these birds disappear

**YOUNG GROUSE, right, are among the many species of wildlife that take advantage of the food and cover found in permanent herbaceous openings such as those maintained along rights of ways, below.**



Leonard Lee Rue III



and in their place come vireos, tanagers, ovenbirds, woodpeckers, and still other animals.

It takes a lifetime to witness this transformation on a given tract. But, fortunately, it can be observed in a matter of hours by hiking through an area where all these habitat types exist, a State Game Lands is a perfect place for just such a hike. Open areas, hedgerows and wetlands, and prescribed amounts of clearcuts, seedling, sapling and mature forest stages have been developed and are being maintained to provide the needs of all wildlife on each State Game Lands.

For management purposes, State Game Lands acreage is categorized as either agricultural or forested. Agricultural areas are managed for farmland wildlife. Open areas, hedgerows, wetlands and woodlots are the basic habitat types on agricultural lands.

Open areas are developed and maintained on fields best suited for crop production. A six-year rotation schedule, beginning with two years of corn and followed by a winter grain (winter wheat, rye or barley) and then two years of hay, is completed with a planting of clover. Clover fields are highly beneficial to wildlife. Ring-necked pheasants nest in them and deer, turkey, Canada geese and many other species use these areas for feeding. They are easily maintained for several years with just periodic mowing.

Of all habitat types, open areas are the most expensive to develop. Fertilizing, planting and annual harvesting require more manpower and equipment than the Game Commission can afford. As an alternative, open areas are developed by leasing fields to farmers who cultivate and plant according to a Game Commission crop rotation schedule and other specifications. Under basic lease arrangements negotiated by land managers, participating farmers receive, depending on the soil type, 75 to 85 percent of the crop. The remainder belongs to the Game Commission and is nor-

mally left standing as food and shelter for wildlife. Occasionally, criticisms about farming practices on State Game Lands are voiced by sportsmen. Many don't understand why, with so much of Pennsylvania already devoted to agriculture, State Game Lands must be farmed so intensively. They think wildlife, game in particular, would be better served if these fields were allowed to revert into a natural state.

Those who lease farming rights to State Game Lands fields are actually providing the Commission and sportsmen an important service. To let all agricultural fields revert to brush is mismanagement. While some wildlife would benefit from a proliferation of reverting fields, such benefit is only short term. In a few years, it would be essentially impossible to clear these areas again, and a valuable ecological component would be lost.

### Hedgerows

Hedgerows are another important wildlife habitat. They provide food and cover for just about every species of farmland wildlife. Unfortunately, they are rapidly disappearing from Pennsylvania's agricultural landscape; but not on State Game Lands. Food and Cover crews develop and maintain extensive networks of hedgerows between fields and along borders, providing scenes reminiscent of the state's farmland in past generations. Conifers, dogwood, crabapple, coral berry, bittersweet and bristly locust are just some of the shrubs planted for wildlife food and cover. The fruits of these shrubs are especially helpful in carrying many species through the winter.

Wetlands are valuable for wildlife and our environment in general. Swamps, marshes and bogs provide homes for more kinds and higher numbers of animals and plants than any other habitat, and they are instrumental in controlling soil erosion and flooding. Unfortunately, wetlands were historically considered wasteland, and were often the first areas to

be converted to commercial uses. Only recently has their value been recognized and development policies enacted to reflect their importance to our total environment.

Swamps, marshes and bogs on State Game Lands are protected and are managed to preserve their value to wildlife. Utmost care is taken to assure these fragile areas are not adversely affected by nearby farming, cutting and other practices. In addition, using funds derived from the sale of Pennsylvania's waterfowl stamps, the agency is purchasing suitable wetlands to further protect this habitat in the state.

In other areas, where soil and other land uses permit, shallow water impoundments are constructed. These impoundments are usually five to 10 acres in size, but some as large as 75 acres have been constructed. Often, three or more small impoundments are built in series, like beaver dams.

To enhance wildlife production on wetlands and around impoundments, Food and Cover crews build and erect artificial nesting devices for waterfowl and songbirds.

Game Lands woodlots are managed according to sound forestry principles. Poorly formed and unproductive growth is routinely cut to encourage

growth of trees and shrubs beneficial to wildlife.

Land managers and their Food and Cover crews are responsible for a great deal of habitat work. In addition, they provide many services which have the needs of hunters and other Game Land users in mind. They maintain roads, parking lots and shooting ranges, repair buildings, erect direction and information signs, mark borders and carry out numerous other tasks.

Nearly 75 percent of State Game Lands acreage is classified as forest and managed by the Commission's forestry staff according to accepted silvicultural practices. The primary objective is to provide for the needs of all woodland creatures. In essence, this is accomplished by providing a complete series of successional forest stages, spatially arranged to best benefit all species. This is accomplished by providing herbaceous and evergreen cover, and by conducting regulated timber sales to maintain adequate proportions of seedling, sapling and mature timber stages.

State Game Lands classified as forested are managed as units or compartments. From 2 to 5 percent of a unit is kept in permanent herbaceous openings containing grasses and legumes. These openings are one to five acres in size, and not more than a mile apart. They provide food for many species of wildlife, notably deer, in early spring when other foods are absent or in short supply. This cover is also used by field sparrows, vesper sparrows, and other breeding birds, and supports high densities of small mammals. The abundance of insects in these openings, provides a high quality protein source for many animals, such as turkey and grouse polts.



**ARTIFICIAL** nesting devices, such as this wood duck nest box, are erected in wetland and open areas to enhance nesting opportunities for waterfowl and songbirds.

Leonard Lee Rue III

GAME NEWS



Herbaceous openings are especially beneficial near spring seeps or coniferous cover.

Tracks in the snow clearly indicate the importance of evergreen cover in winter. Hawks and owls use these areas for perching and hunting. Songbirds use this cover type for nesting, and many animals relish conifer seeds.

Management guidelines specify that 5 percent of a compartment be maintained in evergreen cover, in stands one-half to 20 acres in size. Wherever possible, evergreen cover is developed along streams and around spring seeps, as in these areas it is most heavily used by wildlife. Conifer plantings also protect the water resource. This cover type specification is normally fulfilled with naturally regenerating conifers, but limited plantings are conducted where necessary. Rhododendron and mountain laurel thickets also satisfy this cover requirement in some management units.

### One Percent Per Year

The bulk of the forest management program revolves around commercial timber sales. Using a 100-year cutting schedule—cutting one percent of the manageable forest unit per year—prescribed amounts of each forest habitat type are maintained. Younger forest habitats provide food and cover for essentially all species of wildlife at various times of the year and, again, the specific habitat needs for many species of small mammals and breeding birds. Forestry crews select areas to be cut, mark trees for cutting, and then invite commercial logging companies to bid on the timber.

Over the past five years, an annual average of nearly 9000 acres has been cut commercially, yielding a harvest of 22 million board feet of lumber per year. This, and the sale of pulpwood harvested from these cuts, has returned an average of over \$2.8 million to the Game Fund each year. These figures don't include various other cutting activities conducted on State Game Lands, such as fuel wood cut-

ting, roadside maintenance, and for research projects. Over the long term, an average of 11,000 acres are scheduled to be cut each year.

By conducting these regulated timber sales, 10 percent of a management unit is maintained in seedling and sapling stages. Cut areas are not more than a half-mile apart and are usually 50 acres or less in size. Large cuts are made, however, where heavy deer browsing is anticipated.

During cutting operations, great care is taken to protect especially beneficial trees and shrubs. Highly preferred food producers such as dogwoods, witch hazel, serviceberry, hawthorns, alder, hornbeam apple and cherry are not cut or destroyed, but left standing to provide food for wildlife.

After cutting is completed, herbaceous plants, such as grasses and legumes are planted in roadways and log landing areas. These serve as forest open areas, and along with border cuttings along rights-of-ways help satisfy the open area specifications.

Gypsy moth damage has had an effect on our timber cutting plans, and shows how management plans can be modified to meet unexpected occur-

**THE BULK of the forest management program revolves around commercial timber sales. By cutting one percent of the forest management unit per year, prescribed amounts of each forest habitat type are maintained.**





**CAVITY NESTERS** receive special consideration in the Game Commission's timber cutting guidelines. Selected snag and cavity trees are left remaining on cut areas to provide ample homesites for the nearly 50 species that use cavities.

Leonard Lee Rue III

The importance of mast as a wildlife food source cannot be overemphasized. Fruits produced over the state's 16.7 million forested acres (58 percent of the state) are literally the mainstay of our wildlife resource. The agency's forest management policy requires that at least 25 percent of each management unit is maintained in mast producing stands. Oaks, of course, are the most abundant mast producing trees, but others such as beech, birch, cherry and maple are also important food producers.

rences. Where gypsy moth damage has been significant—especially in the northeast, northcentral and south-central regions—the dead and weakened trees are being cut instead of those originally scheduled for cutting. Substituting areas heavily impacted by gypsy moths for those originally scheduled for cutting has minimized the effects of this insect damage.

One particular guideline deserves mention because it reflects the agency's commitment to all wildlife, not just huntable species. Woodpeckers, chickadees and bluebirds are among 32 species of Pennsylvania's breeding birds which need cavities for nesting. At least 17 species of mammals, including raccoons, squirrels and mice, also use tree cavities. In many areas, increased fuelwood cutting, removal of hedgerows, and poor timber harvesting practices have adversely impacted on all cavity nesters. Recognized a need for den trees, Game Commission policy calls for reserving snag or cavity trees on each acre being cut. Programs promoting artificial nest boxes are popular and exciting but the needs of cavity nesters can be adequately met only through sound forest management practices.

Water can be a more critical need of wildlife than food or cover. Satisfying this need is possibly the most important consideration in management planning. Specific guidelines for protecting and improving spring seeps and for developing wetlands are incorporated into all forest management plans. All existing spring seeps receive special consideration and are protected from timber cutting operations. Low cover habitat is established around them and small pockets of shrubs are maintained nearby.

### Overall Plan

Through implementation of these forest management guidelines, the Pennsylvania Game Commission has set in motion an overall management plan providing for all forest wildlife in perpetuity. There will always be meadows for goldfinches, clearcuts for yellowthroats, snags for woodpeckers, and mature timber for vireos. By continually monitoring and assessing forested holdings, the Commission's foresters are able to satisfy wildlife's needs and the same time provide raw materials for many industries.

Oftimes, the Commission's forest management program has been criticized on the mistaken assumption that

**GAME NEWS**



timber sales are conducted solely to produce revenue for the agency. Nothing could be further from the truth. While timber sales do provide substantial annual augmentations (1983-84 timber sales accounted for \$4,785,109, or 14.7 percent of the agency's total income), monetary gains are a secondary benefit. Many critics fail to realize that sound timber management goes hand in hand with scientific wildlife management. Timber is a renewable resource that should be harvested, just as wildlife should.

The Pennsylvania Game Commission manages the entire State Game Lands network under the premise that habitat diversity is paramount to sound wildlife management. According to established management guidelines, each Game Lands contains an adequate blend of habitat types arranged to mosaic-like patterns for the benefit of wildlife.

As you visit a State Game Lands, either on a leisurely afternoon hike or on an intense hunt for a ruffed grouse

or two, take a close look at the surroundings. That patch of pines on the hillside is there for a reason. The snags remaining in a clearcut area are there for a reason. The stand of saplings where the grouse seem to be is there for a reason, too.

Just Look Around

If an absence of game leaves you wondering what the Game Commission is doing for you, just look around. The evidence is there—and it always will be. In coming years less and less land will be devoted to wildlife. In many areas of Pennsylvania, State Game Lands already represent the only undeveloped places where wildlife can be found.

In 1969, the Game Commission instituted basic land management policies that will continually provide for the needs of wildlife. These plans are in operation today. They will be tomorrow, and for long into the future. There will always be places for all wildlife on State Game Lands.

GAME NEWS

Enclosed find check or money order for \$\_\_\_\_\_ for my subscription to Pennsylvania GAME NEWS. Remittance must accompany order.

☐ NEW    ☐ RENEWAL    \_\_\_\_\_  
ACCOUNT NUMBER

(Check One)

In U.S.    ☐ 3 Years \$16.50    ☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

Name \_\_\_\_\_  
(print plainly)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_  
(Zip Code)

NOTE: All remittances should be made payable to the

PENNSYLVANIA GAME COMMISSION

Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567

DO NOT SEND CASH

Please allow 60 days for first copy.



**I TRULY** enjoy splashing through the creeks and breaking through ice-covered waters in an effort to understand more about the nature of furbearers.

As in all aspects of trapping, there's always something to learn about prospecting, regardless of how many years of experience you have under your belt. Personally, I believe that's what makes this activity so gratifying. I truly enjoy splashing through the creeks and breaking through ice-covered waters in an effort to uncover that which few people understand—the nature of furbearing critters.

Sure, some people pass themselves off as experts, but take them to the field and most degenerate into novices. There's an art to uncovering the movements of critters along a stream with no mud or sandbars. Or maybe it's a science. Whichever, few people truly grasp it.

When scouting for any furbearer along the waterways, a trapper is always looking for signs of the quarry's travels, denning or resting areas, toilet areas, and feeding locations. Sure, other areas are worthy of consideration, but none is as specifically essential to your steel-stringing efforts as the ones listed. These locations are the

# SHORELINE SCOUTING

By Joseph Kosack

**A**S THE COOL October winds of the northwest beleaguer the summer freshness of Penns Woods, the sensation begins. At first, it's simply an urge to stare at creeks and fields as you drive down the road. Soon thereafter, as the lush vegetation devolves to mere brown skeletons, the hankering erupts into a true passion. Yes, once again it's time to prospect for furbearers.

You know the time very well, for the adventures and mysteries of past traplines have fueled your thoughts throughout the summer. That annual dose of creek slopping and field stomping creates an insatiable need to be close to the land. And no outdoor effort gets you closer than prospecting for furbearers.

mainstays of the fur prospector's probe.

Rather than trying to break down methods of scouting for each furbearer found along Pennsylvania's waterways, I'll center on general areas which seem to always provide good results for those of us with watchful eyes. Many of these locations require more than a casual glance at the ground, but that's what this effort is all about, finding what isn't always obvious.

A basic rule for anyone seriously interested in finding furbearers along the water is simply to travel the creek in a manner that will permit you to see all that transpires within its reaches. The only way to do that is by walking

GAME NEWS



up the creek. Here, you can see that muskrat hole hidden in the rear of an exposed root system. Also, from this vantage point, you're permitted to see the shoreline as a traveling furbearer would.

On the other hand, if you walk the shore you're going to pass up plenty of sign depicting movements or specialized activities. Many furbearers move cautiously along the waterways or hide in areas which offer them some form of cover. A shore-walking trapper, like a predator stalking smaller furbearers, just can't see what the secretive critters are doing. You could say furbearers are more concerned with hiding their presence from creatures of the land than those of the water.

Many areas along watercourses will be attractive to a wide variety of furbearers. It is here that the trapper should place emphasis on his investigative efforts. For example, locations such as feeder streams and culverts are frequently visited by many species of furbearers. So a trapper must not concentrate on tracking one furbearer, but rather all species associated with the watery element. It's important to know what's roaming the area before you set traps as you won't want to set a muskrat trap in a location which could produce a beaver or raccoon. In the same respect, you wouldn't want to set a beaver trap in an area where it could be sprung by a wandering 'rat.

### Sandbars Easiest

Sandbars and muddy areas along a creek are still the easiest locations to uncover signs of furbearer activity. Furbearers habitually patrol these areas in search of goodies washed ashore, and also for the ease and comfort of travel. Many times, sandbars are located on points or bends in a meandering stream. At these locations, a trapper must thoroughly search the area for signs of movement, as furbearers have a habit of steering away from the water to take a shortcut. Sure, muskrats will rest and dine on  
OCTOBER, 1985



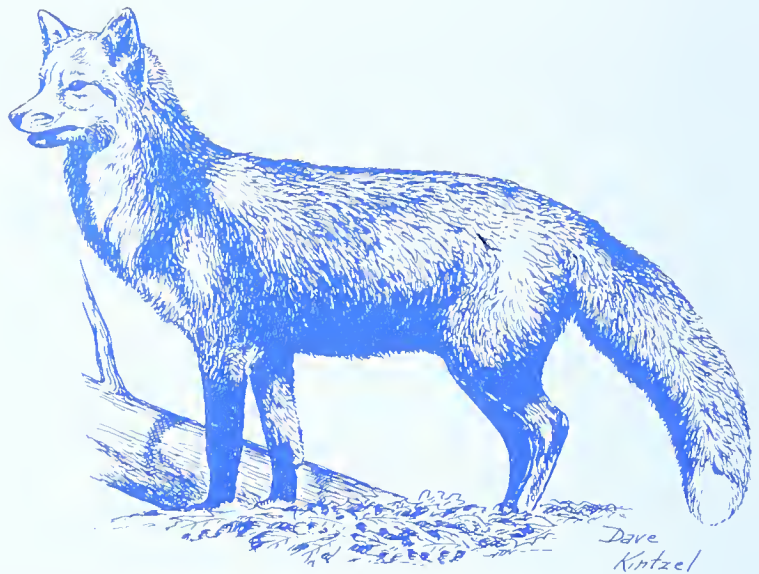
**MANY AREAS** along watercourses will be attractive to a wide variety of furbearers. It is here that the trapper should emphasize his investigative efforts.

these turns and points, but a traveling raccoon will oft times head overland to make time reaching a predetermined hunting or feeding site. So watch — not all furbearers hug the shore in their travels.

Furbearers are quite fond of traveling under bridges rather than going overland, especially when there's a road to cross. Usually, they avoid the strange activity the roads present and stay below. Atop of this, the animal can continue to hunt if it stays along the creek.

Watch along the sides of the bridge and the shoreline for signs of furbearers when investigating under the span. It's their nature to walk along the edges; probably instinctive, but nonetheless habitual. In some cases, you won't be able to distinguish signs of activity under the bridge because of fast water or no available mud for tracking. Still, don't drop your investigation of the site. Simply take a stroll above and below the bridge, scouting the shoreline for activity. Nine chances out of ten, if the critter is hugging the shore near the span, it'll be traveling under it.

Log jams and debris piles along the watercourse are good locations to examine for furbearer activity. Here, muskrats often make their secretive resting and feeding areas. Raccoons and mink grope and probe the nooks and crannies of these supermarkets of the creek for hiding brook trout, cray-



**FOXES ALSO ARE FOND of edges where corn or grain fields meet the water. They hunt here for rodents, birds and other treats.**

fish, frogs, and a host of other lesser species common to the waters of the state.

Logs along the creek are popular with furbearers. They provide a dry way to cross the creek. They make neat resting and play areas for raccoons and muskrats. And to magnify their appeal, furbearers like to snoop around them for a meal of grubs or mice.

Knowing there is ample cause to inspect the logs, a trapper should never think twice about taking a few extra steps to scrutinize the fallen timber properly. Look on the log for scratches, muddy or frozen footprints, droppings, and partly eaten bits of food.

### **High-Interest Areas**

Old stumps, deteriorating trees and rock piles are also high-interest areas for the investigating furtaker. Just about every carnivorous and insectivorous furbearer in the state will spend some time at these locations. They know their prey species seek out such protected areas and take advantage of the prey's preference. Look for scats around these areas and for signs of prey extrication or a predator's penetration into the focal point as it hunts for food.

Areas where corn or grain fields meet the water offer the trapper another outstanding location to scout for activity. Here, rodents and insects abound, and furbearers are attracted by the large prey populations. Atop this, the grain in the field will also lure some furbearers. Raccoons are common visitors to areas where cornfields border water. In spring and summer, these areas offer raccoons a watery environment to pursue aquatic critters, and the cornfields provide an excellent location for them to do some grasshopper or insect hunting. Look for their tracks between corn rows and on muddy areas adjacent to the creek.

Foxes are also fond of these areas. Here, the fox has the opportunity to hunt for rodents, birds and plenty of other critters and treats. Look for fox tracks and scat along the edges of the environment. Investigate the perimeter of the woods, crop changes, creeks, or simply the dirt road or path leading into the area.

Slow-moving sections of stream offer more animal activity than the rapids or ripples. In these areas, the muskrats swim with ease. Predators such as raccoons and minks can detect movements and noise while hunting without the interference of quick-

**GAME NEWS**



moving water. Even a fox will come to these quiet areas to enjoy a drink of slow-flowing water.

Pay extra attention to the quiet, slow-moving sections of creek. All creatures that walk this earth seem attracted to them. Whether it's a fisherman searching for success or a frog looking for an easier life, the slow water provides for all. So put that extra effort into your investigation in these areas. If there are furbearers in the area you're scouting, they'll be visiting the pools and slow-flowing stretches.

Any object that stands out along the creek should be studied, as furbearers share our fascination with anything that cries for attention or is out of place. Whether it's a freshly felled tree or a 55-gallon drum that's washed ashore, furbearers seem compelled to examine it. Capitalize on their curiosity and give these objects the once over. Many times, the effort will be fruitless, but then there are those other times when the probe will make all the difference in the world.

When looking for furbearer sign, you'll have to concentrate on tracks, scratches, signs of feeding, fur, scats or droppings. In some cases, as when beaver or muskrat scouting, you'll also be looking for den holes and lodges, but mostly you'll be scanning for tracks. These indicators are the essence of prospecting. Without them, you're just guessing, but with them you'll have all the confidence required to

## River Otter Reward

The Pennsylvania Trappers Association has announced it will pay a \$500 reward for information leading to the arrest and conviction of any person committing a river otter violation. Information should be submitted to Secretary Gary Walter, 21 Bellview Rd., Marysville, PA 17053.

produce in trapping if your setting procedures are adequate.

If you're not familiar with the tracks of all mammals found in your area, buy a track manual before you head out to canvass the creeks and surrounding countryside. Many of the tracks left by this state's animals are similar, and only experience or a manual will help you to properly identify them. It doesn't matter whether you head to the field with knowledge in your pocket or your head, just have the means to recognize what you discover.

On the whole, prospecting is one of the true highlights of fur-taking. It affords you the opportunity to understand what's happening underfoot and enhances your knowledge of the state's fauna. If you're successful in your investigative efforts, you'll be rewarded with plenty of pleasant surprises when your flashlight beam scans the trap site in the early morning hours. And I haven't met a trapper yet who didn't like surprises!

## Cover Story

Canada geese are among the most challenging game birds. They're smart. Coercing one into shooting range requires preparation and skill. Decoys have to be positioned realistically, hunters must remain hidden, and the calling has to sound just right. Thanks to modern wildlife management practices, hunters statewide can find nearby goose hunting opportunities. At this time of year resident birds and migrants can be found resting along rivers, lakes and even farm ponds, and feeding in harvested grain fields.

The response to our questionnaire was overwhelming. . . .

# The Results Are In

By Bob Mitchell

Assistant Editor: GAME NEWS

**WE** HEARD from nearly 20,000 subscribers in response to the questionnaire we ran in the January issue.

The first order of business was adding three months to the subscription of each respondent who returned a questionnaire within the specified two-week time period. Then the answers had to be tabulated by hand as we didn't have access to computer facilities. Both of these were tremendous chores, handled by our circulation crew—Kim Coover, Betty Ashenfelder, Dolly Fronk and their supervisor Libby Williams.

The other seemingly long delay in reporting these results is due to the time it takes to publish a magazine. This report was prepared in June.

We consider the GAME NEWS questionnaire project a success. We learned a lot about our subscribers and their outdoor interests, and we've already begun using this information to make the magazine even more appealing. We're especially glad, though, to find that, by and large, our subscribers like the magazine the way it is. We do, too. We were delighted to receive the thousands of letters included with the questionnaires. They were all read, but we could never begin to individually answer them.

Here are the results, printed in much the same form as the original questionnaire. Unless otherwise indicated, the numbers represent percentages or averages. For this analysis, 1100 questionnaires were used, more than enough to attain the accuracy we needed.

---

## GAME NEWS

- 1. For how many years have you been receiving GAME NEWS? 14.1 years
- 2. Number, age and sex of persons who read your copy of GAME NEWS:

Under 12	12-16	17-40	41-65	Over 65
M 3.7	M 7.4	M 35.3	M 23.2	M 6.1
F 1.6	F 2.1	F 10.8	F 7.7	F 2.0

An average of 2.3 individuals read each copy of the magazine. Of our readers, 75.7 percent are male, 24.3 percent female.



3. Do you regularly read the following GAME NEWS features?

Editorial	89.3	Archery (Keith Schuyler)	61.2
Field Notes	97.8	Guns (Don Lewis)	85.6
Conservation News	82.7	In the Wind	83.9
OWL (Bill Einsig)	64.1	(Bob Mitchell)	
DGP Diary	77.1	Annual Report	68.4
Thornapples	80.9	(January issue)	
(Chuck Fergus)			

Thirty-three percent reported reading the entire book.

4. Would you like to see more, less, or about the same of the following subjects in GAME NEWS?

	More	Less	Same
Game Commission programs and activities	24.1	4.7	71.2
Wildlife management	36.9	2.7	60.4
Wildlife natural history	47.6	5.0	47.4
How-to-do-it articles	51.9	7.1	41.0
Where-to-go articles	50.0	8.6	41.4
Deer hunting	60.3	2.0	37.7
Bear hunting	43.0	4.7	52.3
Small game hunting	37.7	5.4	56.9
Waterfowl hunting	20.4	20.9	58.7
Turkey hunting	46.2	5.1	48.7
Varmint hunting	21.1	19.8	59.1
Trapping	20.0	22.6	57.4
Dog articles	23.5	20.9	55.6
Trophy photos	31.3	13.3	55.4
Other subjects you'd like: muzzleloading, cooking			

5. How do you feel about the use of outdoor-related advertising in GAME NEWS?

Favor: 31.0      Oppose: 50.8      No Opinion: 18.2

6. Would you like color art and photos in GAME NEWS?

Yes: 56.7      No: 41.7      No Opinion: 1.6

7. Would you like GAME NEWS to be changed from its 6 x 9 size to an 8¼ x 11-inch format?

Yes: 23.5      No: 76.5

8. The use of full color and/or a size change would add to our production costs. If made, should such changes be financed by

Increased Subscription Cost: 34.8      Advertising: 41.7      Other: 19.6  
No Answer: 3.8

9. Which outdoor magazines besides GAME NEWS do you subscribe to or buy regularly?

Outdoor Life: 39.9      Field & Stream: 27.0      Sports Afield: 16.0  
Pennsylvania Sportsman: 28.6      Pennsylvania Outdoors: 13.3  
Fin & Feathers (Pa. edition): 7.6      Northeast Hunting & Fishing: 0.7  
Others: American Hunter: 25.7      American Rifleman: 10.3

More than 30 other magazines were mentioned

Thirteen percent reported reading no other outdoor magazine.

## HUNTING AND TRAPPING

1. Do you regularly hunt in Pennsylvania?

Yes: 94.2      No: 5.8

2. How many persons in your household hunt? 166/100 subscribers

3. Do you and/or members of your household specifically hunt the following in Pennsylvania? Please don't answer yes to game species taken only occasionally while hunting another species.

Rank	Game Species	Percent who hunt	Rank	Game Species	Percent who hunt
1.	Deer	88.8	10.	Doves	24.8
2.	Cottontail rabbits	68.6	11.	Geese	16.3
3.	Pheasants	60.5	12.	Ducks	16.0
4.	Turkeys (fall)	58.4	13.	Crows	14.7
5.	Squirrels	55.6	14.	Woodcock	12.8
6.	Ruffed grouse	55.3	15.	Foxes	10.9
7.	Gobblers (spring)	48.3	16.	Raccoons	7.7
8.	Woodchucks	37.5	17.	Snowshoe hares	3.6
9.	Bear	33.2	18.	Quail	2.8

4. Approximately how many days per year do you hunt in Pennsylvania?  
28.3 days

Approximately how many days do you and your family in total hunt in a year? 38.9 days

5. Approximately how much money do you spend annually on hunting and related expenses such as guns, ammo, clothing, travel, licenses, etc.?

\$391.61 per family,      \$302.82 per individual

6. How many miles per year do you drive in connection with hunting and/or trapping? 1015 miles



7. Do you use Pennsylvania State Game Lands for:

Percent who participate			Percent who participate		
Rank	Activity		Rank	Activity	
1.	Hunting	79.3	6.	Dog training	11.1
2.	Hiking	53.1	7.	Snowmobiling	5.1
3.	Photography	29.5	8.	Trapping	4.5
4.	Nature study	25.7	9.	Fishing	2.0
5.	Birdwatching	16.2	10.	Horseback riding	1.3

8. Do you trap in Pennsylvania? Yes: 13.6      No: 86.4

9. Including you, how many in your household trap? 20/100 subscribers

Age	Less than 16	16-30	31-45	46-64	Over 64
%	18.1	38.4	25.0	13.4	5.1

10. For what species do you trap?

Rank	Species	Percent	Rank	Species	Percent
1.	Raccoons	96.0	6.	Beavers	14.0
2.	Foxes	83.3	7.	Skunks	10.0
3.	Muskrats	76.0	8.	Coyotes	6.0
4.	Mink	23.3	9.	Weasels	5.3
5.	Opossums	20.0			

DEER HUNTING AND GUNS

1. For how many years have you been hunting deer? 26.1 years

2. How many deer have you legally taken in Pennsylvania during your hunting career?      Antlered: 6.4      Antlerless: 6.0\*

\*for those who reported hunting antlerless deer

3. Do you hunt deer in the following seasons? Numbers are percent of deer hunters who hunt in the seasons.

Archery	44.5	Regular firearms	98.1
Muzzleloader	26.9	Antlerless	62.4

4. What make, model and caliber firearm(s) do you use for deer? See accompanying tables.

5. What make and power of scope(s), if any, do you use for big game?

Of the deer hunters, 88 percent have at least one rifle equipped with a scope. Conversely, 12 percent don't use a scope. Of all scopes reported,

38.37 percent were straight powers, 61.63 percent were variables. See accompanying tables for more definitive results.

6. Do you *a/ways* send in a Big Game Harvest Report Card after taking a deer, bear or turkey?    Yes: 91.2    No: 8.8
7. Do you annually apply for an antlerless deer license?    Yes: 56.4    No: 43.6
8. Who processes big game animals taken by you?  
Yourself: 46.9    A friend: 10.5    A commercial butcher: 42.6
9. Are you in favor of requiring every county treasurer to hold a public drawing to select antlerless license recipients?    Yes: 65.4    No: 34.6
10. Did you calculate any county's antlerless deer license allocation using the information and procedures presented in the November GAME NEWS?  
Yes: 24.8    No: 75.2
11. How many rifles: 4.1, shotguns: 3.0, handguns: 1.5 does your household have? (No answer required if you are reluctant to give this information. However, no one except the GAME NEWS staff will have access to this information. Only averages will be reported.) Ten percent didn't answer.
12. How many persons in your household shoot? Number per 100 subscribers  
Hunting: 155.7    Plinking: 105.6    Trap: 38.3  
Skeet: 23.9    Target (Rifle): 112.6    (Handgun): 76.3
13. Do you believe a U.S. citizen has the right to use a firearm to defend himself, his family, and/or his property against criminal action?  
Yes: 98.3    No: 1.7





**Table 1**  
Most Popular Calibers

Rank	Caliber	Percent
1.	30-06	34.20
2.	30-30 Winchester	15.46
3.	308 Winchester	9.86
4.	270 Winchester	9.59
5.	243 Winchester	5.55
6.	35 Remington	3.92
7.	300 Savage	3.26
8.	7mm Remington Mag.	2.61
9.	32 Special	2.48
10.	257 Roberts	1.37
11.	6mm Remington	1.24
12.	8mm Mauser	1.04

Over 40 other calibers constituted the remaining 9.49 percent.

**Table 2**  
Most Popular Firearm brands

Rank	Brand	Percent
1.	Remington	40.56
2.	Winchester	24.76
3.	Marlin	11.41
4.	Savage	8.69
5.	Ruger	3.16
6.	Sako	1.40
7.	Weatherby	1.23
8.	Browning	0.97
9.	Stevens	0.35
10.	Assorted sporterized	
	military	4.57
11.	Others	2.90

**Table 3**  
Most Popular Rifle Models

Rank	Brand and Model	Percent
1.	Remington 760	17.10
2.	Remington 700	11.18
3.	Winchester 70	9.27
4.	Marlin 336	5.98
5.	Winchester 94	5.26
6.	Savage 99	3.11
7.	Ruger 77	2.63
8.	Winchester 88	2.58

**Table 4**  
Five Most Popular Deer Rifles and Calibers

Rank	Brand and Model	Caliber	Percent
1.	Remington 760	30-06	12.80
2.	Remington 700	30-06	5.40
3.	Winchester 94	30-30	4.40
4.	Marlin 336	30-30	4.05
5.	Winchester 70	30-06	4.02

**Table 5**  
Most Popular Scope Powers

Rank	Power	Percent
1.	3x-9x *	42.09
2.	4x	29.13
3.	2x-7x **	10.75

\*includes 3½x-10x

\*\*includes 2x-8x and 2½x-8x

**Table 6**  
Most Popular Scope brands

Rank	Brand	Percent
1.	Leupold	21.31
2.	Bushnell	19.00
3.	Redfield	17.85
4.	Weaver	14.92
5.	Tasco	7.73
6.	Bausch & Lomb	2.22
7.	Lyman	1.42
8.	Burris	0.98
9.	Unertl	0.80
Other brands		5.77
Brands unspecified		7.99

**Table 7**  
Most Popular Scope Brands and Powers

Rank	Brand	Power	Percent
1.	Bushnell	3x-9x	13.12
2.	Leupold	3x-9x	11.79
3.	Redfield	3x-9x	9.56
4.	Weaver	4x	8.11
5.	Bushnell	4x	5.31
6.	Leupold	2x-7x	5.21
7.	Redfield	4x	4.83
8.	Tasco	3x-9x	4.05
9.	Leupold	4x	3.28
10.	Tasco	4x	2.80



# FIELD NOTES



## A Little Tug

**PERRY COUNTY**—Deputy Gene Palm recently told me about his nephew Dennis, who had a hard time getting up to go turkey hunting last spring. Dennis missed two mornings because he didn't hear the alarm. One Sunday evening, he and his uncle Tom located a gobbler. The two devised a foolproof way to awaken Dennis without disturbing the rest of the family. Dennis went to bed with one end of a 30-foot string tied to his wrist. The other end hung out the bedroom window. At 4 o'clock Tom arrived and woke Dennis by tugging on the string. They couldn't call the gobbler in that morning, but two days later Dennis took a 19-pounder, called in—or maybe pulled in—by Uncle Tom. —DGP Leroy Everett, Newport.

## Good Basis

**TRAINING SCHOOL**—Out of 25 trainees enrolled at the Ross Leffler School of Conservation for the 19th Class, twelve were deputy game protectors, and two were deputy waterways conservation officers. This says a lot for the professionalism of our state's fine deputy forces. Being a former deputy myself, I know what a good foundation this experience laid for me to become a Game Conservation Officer. —Trainee James W. Egley.

## Encouraging

**CENTRE COUNTY**—I received more reports of pheasant broods this past spring than I have in a long time. —DGP George Mock, Coburn.

## Tragic Evidence

**TRAINING SCHOOL**—Following the tornadoes that devastated parts of Pennsylvania on the last day of May, we found numerous bits of debris scattered over the grounds—small pieces of roofing material, building insulation, newspapers, invoices, etc.—which had been blown here by the wind. Some were identifiable as having come from extreme western Pennsylvania and Ohio, which indicated they had been windblown as much as a hundred miles. As we picked up these bits of debris, we couldn't help but feel we were picking up small pieces of people's shattered lives. —Resident Instructor James R. Binder.



## Congested

At the end of May it took me two hours to drive a six-mile stretch of road on a local Game Lands, because of traffic jams. One "traffic jam" was caused by a hen turkey with about a dozen poults. Three grouse hens, all with good size broods, constituted others. Numerous woodchucks that wanted to attack my pickup truck, and so many deer that I didn't bother to count, made up the rest. —LMO Ken Zinn, Jersey Shore.



## Rescued from the Pits

**McKEAN COUNTY**—One night this past June, Shane Appleby, Scott Ennis and Dean Goodwil decided to camp in the Devil's Den area above Smethport. They were gathering firewood when they heard a lot of thrashing coming from some large rocks. Investigating, they found a buck trapped in a 10-foot crevice. The buck apparently had slipped into the crevice and become stuck, on its back, in an attempt to jump out. One youngster went to town and got help from Deputy Ed Bigley and his friend Tom Brown. The group managed to move a large boulder and get into the crevice. Then, with poles and ropes, they got the deer back on its feet. From its condition, the guys thought the deer might have been trapped for a week or more, but it still had the strength to run away.—DGP John Dzemyan, Smethport.

## Keepin' 'Em Moving

**VENANGO COUNTY**—The burglar alarm at a local furniture store was tripped twice but the Sugarcreek borough police failed to find anything amiss each time. The third time, however, they caught the culprit. A flicker had been trapped inside and kept tripping the alarm as it flew around, trying to escape. The first two times the officers arrived, the bird hid in the rafters. On the third trip they were able to catch and free it.—DGP Leo Yahner, Franklin.

## A Sign of the Times

**TRAINING SCHOOL**—The average age for this class of trainees is 30.5 years, two years higher than that of the next oldest class. Perhaps this is best reflected by the strong odor of "Ben Gay" after a day of self-defense training and a run through the obstacle course.—Trainee Roland J. Trombetto.

OCTOBER, 1985



## Dead Eye

**BRADFORD COUNTY**—On one of my radio programs I stated that a skunk can spray accurately up to 12 feet. I told the audience the three warnings a skunk usually gives before spraying are: 1) shaking its head, 2) drumming its front feet, and 3) raising its tail over its back and turning its rump toward you. Several weeks later a caller told me I was wrong. He had encountered a skunk and made sure he stayed 15 feet away, but the skunk still hit him. I told him it was just his luck to run into an expert shot.—DGP William A. Bower, Troy.

## Keeping Tabs

**LYCOMING COUNTY**—In June, 1984, I trapped a young male cinnamon-phase black bear. It weighed 128 pounds at the time. After his release, reports of his whereabouts flowed in throughout the year. At least one hunter had a shot at him, but he managed to survive the hunting season. I retrapped this same bear this past June, almost a year to the day after the first time, approximately ten miles from where he was originally trapped. He had gained 125 pounds and was in very good condition. This fall that bear should weigh well over 300 pounds and could make someone a fine trophy, if they can find him. Who knows—maybe I'll trap him next year and be able to update his history.—DGP Dan Marks, Williamsport.



### Be Thankful

**FULTON COUNTY**—I had just purchased an elaborate camera outfit, so decided to put together a slide program on the Forbes Trail. I made a 150-mile round trip to Fort Ligonier to take pictures, but later found out I had spent the whole day shooting blanks—I hadn't loaded the film properly. It's a good thing I wasn't in charge at Ligonier years ago; if I had been, we'd all be speaking French today. —DGP Mark Crowder, McConnellsburg.

### Part of the Training

**TRAINING SCHOOL**—Since coming here in June, many of us have tried numerous ways, with little success, to cope with the loud snoring of several of our roommates. It eventually occurred to me that perhaps there is a beneficial side to these disturbances. By the time we're ready to go on jack-lighting patrols, we'll already be used to staying awake all night. —Trainee T. M. Grenoble.

### For the Woodies

**CLEARFIELD COUNTY**—A special thanks goes to James Salsgiver, Titusville, who recently donated a considerable amount of lumber that will soon be turned into wood duck nesting boxes by the area Ducks Unlimited Greenwings. Thanks also goes to Deputy Greg Rishell for arranging the deal. —DGP Jim Neely, Penfield.

### Fill in the Blank

**INDIANA COUNTY**—As a conservation officer, I should be more aware than most people that wild animals are unpredictable, yet I frequently find myself making predictions on how an animal might behave. Such was the case recently when I was preparing to release a black bear after it had been tagged and weighed. I admonished the onlookers to have their cameras ready because they wouldn't have much time to get a picture before the bear disappeared. Twenty-five minutes later they were still taking pictures as this "showboat" of a bear wandered around making me look like . . . —DGP Mel Schake, Indiana.

### The Answer

**ADAMS COUNTY**—Next to my property were two 10-acre hayfields that had not been cut by July 1. I don't think it's just a coincidence that I later saw two hen pheasants in my front yard. One had seven chicks, the other at least eight. There's also a plentiful supply of rabbits around here. I know from experience that habitat, not stocking, is the answer to plentiful game supplies. If you want to do something good for wildlife, provide suitable habitat. After all, would you stay long in an area if you didn't have food, shelter and water? —DGP Gary Becker, Aspers.

### Something Special

**TRAINING SCHOOL**—We arrived here as a group of 25 strangers with only one thing in common—we were trainees. After just a few weeks of living, learning and working together, though, we developed a common identity and unique bond. We will always be 25 individuals, of course, but we are now and always will be the 19th Class at the Ross Leffler School of Conservation. —Trainee Donald G. Chaybin.

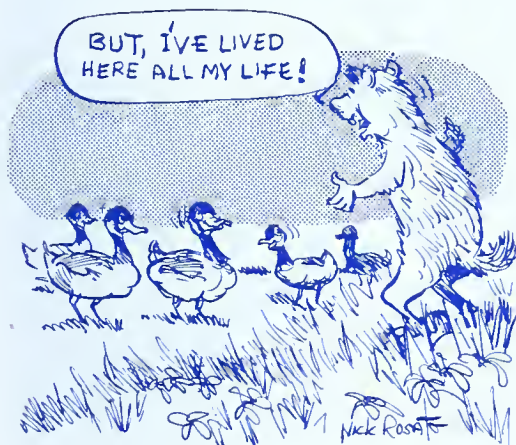


## Durable

**MONTGOMERY COUNTY**—A man called last spring because crows were pulling pieces of vinyl from employees' car roofs at his place of business. Could it be that crows also have discovered the plastic age and are building plastic nests in which to deposit their eggs? —DGP William Waserman, Montgomeryville.

## Struck Out

**SOMERSET COUNTY**—This past May I had the chance to observe an osprey fishing in an isolated lake on Mount Davis. The fish hawk doesn't seem to be the formidable raptor many people think it is. In three attempts, it came up empty-taloned each time. —DGP John G. Smith, Salisbury.



## Get Lost, Chuck

I was recently observing a flock of ten Canada geese and their 20 goslings when I noticed adult geese chasing a woodchuck around the field. The geese were between the woodchuck and its hole, and every time it tried to seek refuge, it was assaulted by 3 or 4 adults. The woodchuck finally fled into a cloverfield where it was held at bay. I was left wondering if maybe the geese were holding a lease on the hole and Mr. Groundhog had failed to pay his rent. —LM Keith Harbaugh, Meadville.

OCTOBER, 1985



## Stuck

**YORK COUNTY**—In gobbler season, Dashel, a friend of mine, and I located a bird at dusk. The following morning found us in the woods by 4 o'clock. An hour's hike got us to the turkey's area. Dashel found a place to sit, and I moved about 50 yards away and lay down. The woods were abnormally dry and noisy, and during the next half-hour I couldn't understand why he hadn't started calling. Finally, the calling began, and for 20 minutes we had two birds responding. Suddenly, Dashel stood up and walked down to me, pulling at the seat of his pants the whole time. I asked what his problem was. "I thought I sat on an ant hill," he said, "only to find out later it was a dead porcupine." —DGP G. J. Martin, Spring Grove.

## Growing in Popularity

**LUZERNE COUNTY**—This past June, on an overcast day with an almost steady rain, 25 Commission officers and 97 students launched the second year of Game Commission hunter education courses in the Poconos. Despite the dismal weather, spirits were bright as these young future hunters received hands on archery, rifle and shotgun instruction. In total, nearly 300 students were accommodated at three camp sessions this year. —DGP Robert W. Nolf, Conyngham.

## Appreciative Pooch

**WAYNE COUNTY**—Deputy Dale Walker was summoned recently to rescue a family dog. Apparently a couple of bear cubs discovered the dog's food dish and began to help themselves. The dog took exception to this infringement and chased the cubs, and the mother bear responded by chasing the dog. The ruckus came to a standstill with the three bears held at bay up a tree by the excited dog, tangled in its chain at the base. The bears left the scene as soon as Dale released the dog, but the incident didn't end too well for Dale. He immediately left for the hospital to get treated for a dog bite.—DGP Donald R. Schauer, Honesdale.



## A Nearsighted One

**McKEAN COUNTY**—A local hunter had his problems in the spring gobbler season. He had called in several birds and finally got a shot at a jake. But as he got up he dropped his eyeglasses. He picked them up and again started to the bird, but dropped his glasses again. This time he couldn't find them or the turkey. It was gone. Several days later another hunter in the same area complained about calling in a turkey which apparently saw him and flushed just as he was about to shoot. He said he was well camouflaged and had not moved. Could it be that this turkey was wearing eyeglasses?—DPG Jim Rankin, Port Allegany.

## Some Progress

**MONTGOMERY COUNTY**—Based on the number of reports I've been receiving, hunters should find more pheasants here this fall than in previous seasons. I think the weather forced many farmers to delay their hay mowing, providing more pheasants an opportunity to successfully raise their young.—DGP D.M. Killough, Perkiomenville.

## A Big Responsibility

**WESTMORELAND COUNTY**—After a hen mallard was killed by someone's freeroaming pet, I acquired her clutch of ready-to-hatch eggs. Eight ducklings hatched and imprinted immediately to my two-year-old son, Nathan. Nate, therefore, was their foster mother. Every morning after breakfast, Nate would stroll down to the creek behind our house, with the ducklings in single file behind him. There Nate would lead them—several times headfirst—into the creek where they could feed. The ducks remained at the creek all day until Nate would go back in the evening and walk them to our basement for the night. I'm happy to report that the ducks were finally released on a local pond and, when last seen, Nate's family was doing just fine.—DGP R. Matthew Hough, Greensburg.

## Made Him Mad

**BEDFORD COUNTY**—Deputy Sam Steele received a call about a young groundhog attacking a family dog. When Sam arrived at the scene, the groundhog was in the wheel well of a car. The poor dog was a 150-pound St. Bernard that completely tore a steel-belted radial tire from the vehicle in an attempt to get at the groundhog. It makes me wonder who was attacking whom.—DGP Dave Koppenhaver, Everett.



# Tentative 1985 Waterfowl Seasons

**S**HORTER seasons and lower bag limits for many waterfowl species have been proposed for 1985 by the Pennsylvania Game Commission in accordance with U.S. Fish and Wildlife Service guidelines designed to reduce harvests of already-low duck populations. As this issue of **GAME NEWS** goes to press, final federal approval has not yet been received. Therefore, check your newspaper for our news releases for actual seasons and bag limits before hunting.

The U.S. Fish and Wildlife Service and the Canadian Wildlife Service anticipate only 62 million ducks—22 percent fewer than in 1984—will migrate southward this fall, and federal frameworks for seasons and bag limits were drawn up with a 25 percent harvest reduction of the migratory birds as the objective.

## Lowest In 16 Years

The fall flight of waterfowl is expected to be the lowest in the past 16 years. Drought conditions in Canada—where most waterfowl nest and rear their young—the past two years are blamed for this year's low bird numbers. Spring breeding populations of ducks this year were the lowest ever documented by survey teams. Less than 5.5 million mallards and fewer than 3 million pintails were observed.

Good duck populations total 90 to 100 million birds. Last year, the figure was 80 million. The outlook for geese in 1985 is generally better, with fall flights expected to be similar to last year.

Only 40 days are allotted for duck hunting in Pennsylvania this year, compared to 50 in 1984, and the daily bag limit has been reduced from 5 to 4. The duck possession limit is now 8. No more than 3 mallards may be taken daily, and only one hen mallard may be taken per day. The daily bag may not include  
**OCTOBER, 1985**

more than 2 pintails. Possession limits on these two species are double the daily limits. Other duck bag limits are similar to those of recent years.

The black duck season runs from October 29 to December 7 in the Lake Erie Zone, from November 7 to December 7 in the Northwest Zone, from November 1 to November 25 in the North Zone, and from November 14 to December 7 in the South Zone.

In the North Zone, the season for other ducks opens October 17 and closes November 25, while the Lake Erie Zone duck season begins October 29 and ends December 7.

In the Northwest Zone, the first segment of the duck season opens October 17 and closes October 25, re-opening November 7 and closing December 7. In the South Zone, the first part of the duck season runs from October 24 to October 30, with the second segment beginning November 14 and ending December 16.

The Canada, snow and blue goose season opens in the North Zone October 5 and closes December 13, while the season for geese in the Lake Erie, Northwest and South Zones runs from October 12 through December 20.

The goose season will run for 90 days from October 12 through January 9 in the enlarged area of eastern and south-



ern Pennsylvania experiencing crop depredations from the big honkers.

Atlantic brant may be taken statewide from October 21 through November 18, again with a daily limit of 2 and a possession limit of 4.

Waterfowl hunting begins at 8 a.m. on October 5 in the North Zone, and at 8 a.m. on October 12 in the Northwest Zone.

As in recent years, not more than 1 black duck or 2 wood ducks may be taken daily, and a hunter may not possess more than 2 black or 4 wood ducks. A hunter may take one canvasback daily. A hunter may take either 2 redheads daily or one canvasback and one redhead daily. The possession limit on canvasback is 1; on redheads, 4.

Although the daily limit on mergansers is 5 with a possession limit of 10, not more than 1 hooded merganser may be taken daily, and the possession limit on hooded mergansers is 2. Hunters this year may take 15 coots daily, with a possession limit of 30.

Extra teal, in addition to regular duck limits, can be taken during the first seven shooting days of the duck season in each of the four waterfowl zones. The extra teal limit is 2 blue-winged or 2 green-winged teal, or 1 of each species daily. The extra teal possession limit is 4, singly or in the aggregate of the two species.

Two extra scaup may be taken daily during this year's duck season in the Lake Erie Zone, with a possession limit of 4.

In most of the state, 3 Canada, plus 3 blue and/or snow geese may be taken per day, with a possession limit of 6 of each species. In Crawford County, the Canada goose daily limit is 1, while the daily limit for Canada geese is 2 in Butler, Erie and Mercer counties. At Pymatuning and Middle Creek Wildlife Management Areas, the daily goose limit is 1, regardless of species.

Hunters may again take 7 sea ducks (scoter, eider, oldsquaw) daily, with no more than 14 in possession.

# **Tentative 1985 Waterfowl Seasons**

## **WATERFOWL ZONES**

### **LAKE ERIE ZONE**

Lake Erie, Presque Isle, and the area within 150 yards of Lake Erie between the Ohio and New York borders.

### **NORTHWEST ZONE**

The area bounded on the north by the Lake Erie Zone and the New York line, on the east by and including the Allegheny River, on the south by Interstate Route 80, and on the west by the Ohio line.

### **NORTH ZONE**

The area east of the Allegheny River and north of Interstate Route 80 from the Allegheny River to Route 220, north of Route 220 from Interstate Route 80 to Interstate Route 180, north and east of Interstate Route 180 from Route 220 to Interstate Route 80, and north of Interstate Route 80 from Interstate Route 180 to the Delaware River.

### **SOUTH ZONE**

All of Pennsylvania not in the Lake Erie, Northwest and North Zones.

## **OPEN SEASONS**

### **LAKE ERIE ZONE**

Black Ducks—Oct. 29 to Dec. 7

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 29 to Dec. 7

Extra Teal—Oct. 29 to Nov. 5

Extra Scaup—Oct. 29 to Dec. 7

Geese—Oct. 12 to Dec. 20



## **NORTHWEST ZONE**

Black Ducks—Nov. 7 to Dec. 7

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 17 to Oct. 25 and Nov. 7 to Dec. 7

Extra Teal—Oct. 17 to Oct. 25

Geese—Oct. 12 to Dec. 20

## **NORTH ZONE**

Black Ducks—Nov. 1 to Nov. 25

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 17 to Nov. 25

Extra Teal—Oct. 17 to Oct. 26

Geese—Oct. 5 to Dec. 13

## **SOUTH ZONE**

Black Ducks—Nov. 14 to Dec. 7

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 24 to Oct. 30 and Nov. 14 to Dec. 16

Extra Teal—Oct. 24 to Oct. 30

Geese—Oct. 12 to Dec. 20

\*Geese—that area east and south of the following boundaries: Interstate Route 83 from the Maryland line to Harrisburg, I-81 from Harrisburg to Route 443, Route 443 from I-81 to Lehighton, Route 209 from Lehighton to Stroudsburg, I-80 from Stroudsburg to the New Jersey line; also, on and within 25 yards of the Susquehanna River from Harrisburg to Northumberland—Oct. 12 to Jan. 9.

Atlantic brant—all zones—Oct. 21 to Nov. 18

## **BAG LIMITS**

Ducks—4 daily, 8 in possession; daily limit may not include more than 3 mallards (only 1 hen mallard), 2 pintails, 1 black duck, 2 wood ducks, 1 canvasback, 2 redheads OR 1 canvasback and 1 redhead; possession limit may not include more than: 6 mallards (only 2 hen mallards), 4 pintails, 2 black ducks, 4 wood ducks, 1 canvasback, 4 redheads

Sea Ducks (scoter, eider, oldsquaw)—7 daily, 14 in possession

Brant—2 daily, 4 in possession

Coots—15 daily, 30 in possession

Mergansers—5 daily, 10 in possession; not more than 1 hooded merganser daily, possession limit of 2

Extra Teal—2 blue-winged or 2 green-winged teal or 1 of each species daily, possession limit of 4 (singly or in the aggregate of the two species)—These limits are in addition to the regular daily and possession limits of ducks

Extra Scaup—2 daily, possession limit of 4, in addition to the regular daily and possession limits of ducks

Snow and/or Blue Geese—3 daily, 6 in possession

Canada Geese—3 daily, 6 in possession

Exceptions for geese:

1. One Canada goose daily in Crawford County; 2 Canada geese daily in Butler, Erie and Mercer counties.
2. One goose on the controlled goose hunting sections of the Pymatuning and Middle Creek Wildlife Management Areas.

## **NO OPEN SEASON—SWANS**

Pymatuning Wildlife Management Area shooting dates—Oct. 12 to Dec. 14; Middle Creek Wildlife Management Area shooting dates—Oct. 12 to Jan. 9, except closed Nov. 2 and Dec. 26–28

## **SHOOTING HOURS—WATERFOWL**

One-half hour before sunrise to sunset.

### **EXCEPTIONS**

1. 8 a.m. until sunset in the North Zone on October 5.
2. 8 a.m. until sunset in the Northwest Zone on October 12.

3. 9 a.m. until sunset statewide on November 2, except in the Lake Erie Zone.
4. Controlled shooting sections of Pymatuning Wildlife Management Area: 8 a.m. until noon on October 12; 9 a.m. until noon on November 2; on other shooting days (Mondays, Wednesdays, Fridays and Saturdays), one-half hour before sunrise to 12 o'clock noon.
5. Controlled shooting section of Middle Creek Wildlife Management Area: one-half hour before sunrise to 1:30 p.m. on Mondays, Tuesdays, Thursdays and Saturdays. (Consult 1985 Pa. Digest of Hunting and Trapping Regulations for Shooting Hours)

## SUMMARY OF FEDERAL REGULATIONS

**NOTICE:** The material below is only a summary. Each hunter should also consult the actual Federal Regulations which may be found in Title 50, *Code of Federal Regulations*, Part 20. In addition to State regulations, the following Federal rules apply to the taking, possession, shipping, transporting, and storing of migratory game birds.

**RESTRICTION.** No person shall take migratory game birds:

- With a trap, snare, net, crossbow, rifle, pistol, revolver, swivel gun, shotgun larger than 10-gauge, punt gun, battery gun, machine gun, fishhook, poison, drug, explosive, or stupefying substance.
- With a shotgun capable of holding more than three shells, unless it is plugged with a one-piece filler which is incapable of removal without disassembling the gun.
- From a sink box (a low floating device, having a depression affording the hunter a means of concealment beneath the surface of the water).
- From or with the aid or use of a car or other motor-driven land conveyance, or any aircraft.
- From or by means of any motor boat or sail boat unless the motor has been completely shut off and/or the sail furled, and its progress therefrom has ceased.
- By the use or aid of live decoys. All live, tame or captive ducks and geese shall be removed for a period of 10 consecutive days prior to hunting, and confined within an enclosure which substantially reduces the audibility of their calls and totally conceals such tame birds from the sight of migratory waterfowl.
- Using records or tapes of migratory bird calls or sounds, or electrically amplified imitations of bird calls.
- By driving, rallying, or chasing birds with any motorized conveyance or any sail boat to put them in the range of the hunters.
- By the aid of baiting (placing feed such as corn, wheat, salt, or other feed to constitute a lure or enticement), or on or over any baited area. Hunters should be aware that a baited area is considered to be baited for 10 days after the removal of the bait, and it is not necessary for the hunter to know an area is baited to be in violation.

**CLOSED SEASON.** No person shall take migratory game birds during the closed season.

**SHOOTING OR FALCONRY HOURS.** No person shall take migratory game birds except during the hours open to shooting and falconry as prescribed.

**DAILY BAG LIMIT.** No person shall take in any one day more than one daily bag limit.

**FIELD POSSESSION LIMIT.** No person shall possess more than one daily bag limit while in the field or while returning from the field to one's car, hunting camp, home, etc.

**WANTON WASTE.** All migratory game birds killed or crippled shall be retrieved, if possible, and retained in the custody of the hunter in the field.

**TAGGING.** No person shall give, put or leave any migratory game birds at any place or in the custody of another person unless the birds are tagged by the hunter with the following information:

1. The hunter's signature; 2. The hunter's address; 3. The total number of birds involved, by species; 4. The dates such birds were killed.

No person or business shall receive or have in custody any migratory game birds belonging to another person unless such birds are properly tagged.



**POSSESSION OF LIVE BIRDS.** Wounded birds reduced to possession shall be immediately killed and included in the daily bag limit.

**DRESSING.** No person shall completely field dress any migratory game bird (except doves) and then transport the birds from the field. The head or one fully feathered wing must remain attached to all such birds while being transported from the field to one's home or to a migratory bird preservation facility.

**IMPORTATION.** For information regarding the importation of migratory birds killed in another country hunters should consult 50 CFR 20.61 through 20.66. One fully-feathered wing must remain attached to all migratory game birds being transported between the port of entry and one's home or to a migratory bird preservation facility. No person shall import migratory game birds killed in any foreign country, except Canada, unless such birds are dressed (except as required in 20.63), drawn, and the head and feet are removed. No person shall import migratory game birds belonging to another person.

**STEEL SHOT, SHOT SIZE—STEEL SHOT** must be used while hunting ducks, geese and/or coots in Crawford County, at the Middle Creek Wildlife Management Area, and on and within 25 yards of the Susquehanna River between Northumberland and the Maryland line; the possession of lead shot in steel shot areas while hunting ducks, geese and/or coots is unlawful. Shot for waterfowl hunting may not be larger than BB size.

**MIGRATORY BIRD HUNTING AND CONSERVATION STAMP.** The law requires that each waterfowl hunter 16 years of age and over must carry on his person a valid Migratory Bird Hunting and Conservation Stamp, or duck stamp, signed in ink across the face.

**REFERENCE.** Federal regulations related to migratory game birds are located in Title 50, *Code of Federal Regulations*, Part 20.

**CAUTION:** More restrictive regulations may apply to National Wildlife Refuges open to public hunting and certain designated state areas. For additional information on Federal regulations, contact Senior Resident Agent, U.S. Fish and Wildlife Service, P.O. Box 11790, Harrisburg, PA 17108, telephone 717-236-4221.

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**Gun Digest**, 40th Ed., edited by Ken Warner, DBI Books, 4092 Commercial Ave., Northbrook, IL 60062, 480 pp., \$15.95. Again this year, as for the past four decades, *Gun Digest* offers advanced shooters an outstanding cross section of gun stuff. Tied in with today's significant interest in military-related equipment are C. E. Harris's "The M16A2: New World Standard for Infantry Rifles," excerpts from William S. Brophy's book, "The Springfield 1903 Rifles," and Larry Sterett's "A New Sniper Round." Massad Ayoob gives highly useful information to concerned citizens in "The Eight Dangerous Myths of Self-Defense." For shotgunners, Don Zutz explains how the use of 10-gauge chokes in bored-out 12-gauge guns makes the smaller gauge shoot tighter, Pete Nelson makes an impressive case for pump guns in the tough real world of waterfowl hunting, and Don Hardin provides historical stuff on the Ansley H. Fox Gun Co. of Philadelphia, who claimed to make the "finest gun in the world." For riflemen, Bev Mann recalls the featherweight M70 he created in the mid-'40s, Sam Fadala goes to bat—with lots of authority—for the M94 Winchester 30-30, and Ed Matunas and Layne Simpson argue the advantages/disadvantages of single shots. There's lots more, including the regular reviews, testfire reports and great catalog section.

# 25-Year Club

*Pennsylvania Game Commission personnel have compiled an enviable record among public and conservation agencies for longevity of service. Few organizations in any area of endeavor can boast so many dedicated employees. The most recent PGC employees to complete 25 years of service are shown here.*



**R. W. Donahoe**  
District Game Protector  
Danville



**R. W. Anderson**  
District Game Protector  
Nazareth



**J. M. Lavery**  
Director, NW Region  
Franklin



**H. W. Bower**  
IES, SC Region  
Huntingdon



**Genevieve Brungard**  
Clerk III, NC Region  
Avis



**J. D. Swigart**  
LMO, NW Region  
Butler



**L. E. Bittner**  
LES, SE Region  
Leesport



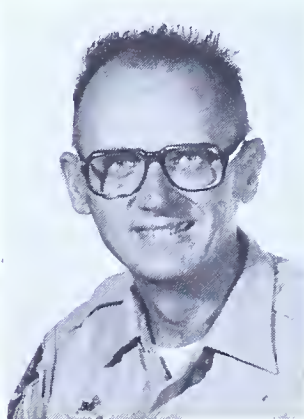
**D. E. Watson**  
LMS, NC Region  
Jersey Shore



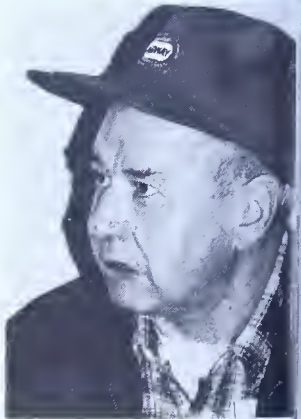
**A. D. Rockwell**  
District Game Protector  
Sayre



**C. D. Hipchen**  
Labor Foreman I  
Hazel Hurst



**J. J. Kriz**  
Wildlife Biologist  
Fairview



**J. W. Way**  
Labor Foreman I  
Coraopolis





**W. R. Peoples**  
LMO, NC Region  
Hawley



**E. H. Keister**  
Semi-Skilled Laborer  
Lewisburg



**R. H. Muir**  
LMO, SW Region  
Kittanning



**E. F. Bond**  
District Game Protect  
Fountainville



**R. J. White**  
Propagator II  
Distant



**H. E. Merz**  
IES, NC Region  
Jersey Shore



**J. W. Lafferty**  
Labor Foreman I  
Buffalo Mills



**J. L. Wiker**  
District Game Protect  
Port Matilda



**T. Vesloski**  
LES, NE Region  
Wilkes-Barre



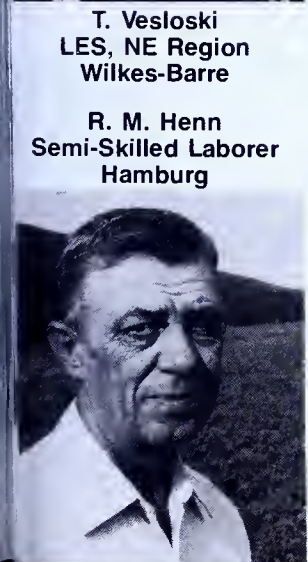
**H. R. Curfman**  
District Game Protector  
Coudersport



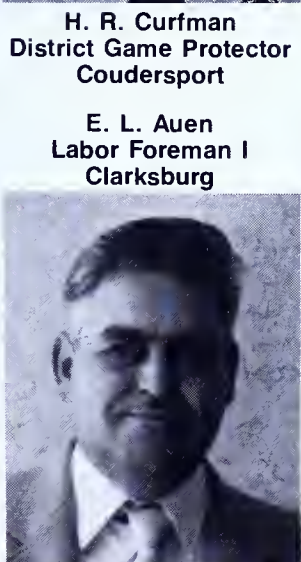
**R. W. Nolf**  
District Game Protector  
Conyngham



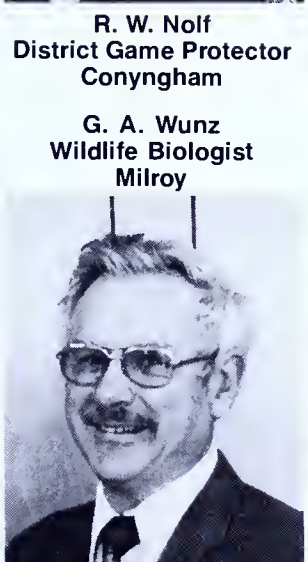
**P. A. Hilbert**  
FAS, SE Region  
Cleona



**R. M. Henn**  
Semi-Skilled Laborer  
Hamburg



**E. L. Auen**  
Labor Foreman I  
Clarksburg



**G. A. Wunz**  
Wildlife Biologist  
Milroy



**B. G. Smith**  
Game Farm Supt. II  
Montoursville

# **GAMEcooking Tips . . .**

## **How to Prepare Fish-eating Duck**

It is much more difficult to prepare a diving duck such as merganser than a river duck like a mallard, teal, or pintail. Diving ducks forage far below the surface of the water in search of their primary source of food, fish, while river ducks eat grains and grasses and feed in shallow water on aquatic life, insects, and snails. Because of this big difference in diet, the flesh of the river duck is a delicacy. Diving ducks must be treated with care in the kitchen if we are to enjoy them, for their meat is understandably strong tasting. Some popular exceptions to this are the excellent eating canvasback and ring-neck ducks. The cook needs as much information possible in order to prepare any kind of game, and that is especially true with duck. If you have taken a diving duck, it is best to label it as such when storing in the freezer.

Successful cooking of all fowl depends on its condition, the care taken in the field, and age. Birds should be cleaned or eviscerated immediately, and every attempt should be made to keep them cool. The next consideration is the bird's age. Size is an indication of this, older ducks being heavier and having more fat per pound.

Fish-eating fowl have rich dark meat that is almost always fishy tasting. Use only the breast meat. Soaking at least 24 hours in vinegar and salt will minimize this problem. Use 2 cups of water to 1 cup of vinegar with four tablespoons of salt for 2-4 breasts or 1 whole duck. Place ducks in a ziploc bag and pour vinegar mixture over. Refrigerate 12-24 hours, depending on the age of the bird and what is known of its habitat. I recommend using seasoned tenderizer on these birds after soaking. Wash and dry fowl before applying tenderizer to the cavity and all surfaces. Allow to stand 2-3 hours in the refrigerator before proceeding with cooking preparation.

So, prior to cooking, we need to soak the ducks from 12-24 hours under refrigeration in a solution of water, vinegar, and salt, then rinse, dry, and apply tenderizer. You are now ready to proceed with Martini Baked Duck, which calls for 8 whole wild ducks (river ducks). To adapt this recipe to diving ducks such as mergansers, use only the breasts, allowing at least 2 breast halves per person. Pretreat as described above.

## **Martini Baked Duck**

### **Marinade**

- 1 quart dry white Vermouth
- 2 cups water
- ½ cup safflower oil
- ¼ cup melted butter
- 2 jiggers gin
- 1 onion reduced to juice in a food processor or blender
- 2 teaspoons ground pepper
- 1 dash red pepper sauce
- 2 large onions, quartered
- 8 bay leaves, cut in half
- 1 navel orange, chopped, with juice
- ½ cup chopped fresh parsley
- 8 wild ducks, cleaned, halved, and skinned

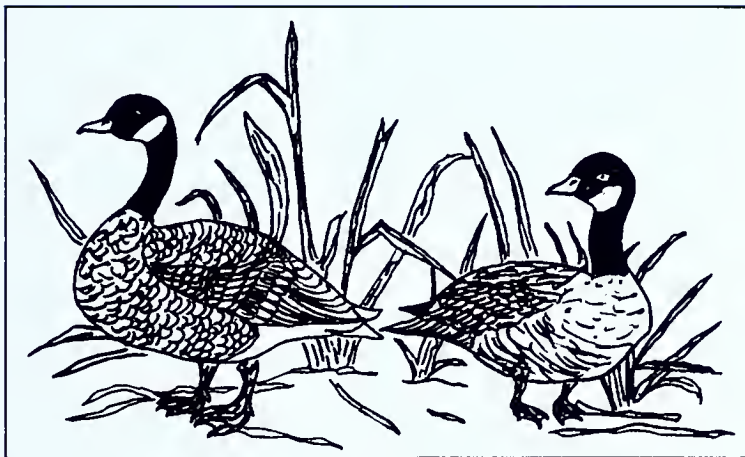
Combine first eight ingredients in a large Dutch oven. Remove half the mixture, and set aside. Heat marinade to a simmer. Place duck halves, flesh-side down, into liquid in pan. Top each with a bay leaf, an onion section, chopped orange and parsley. Bake at 350° for 3½ hours, basting occasionally. Remove from oven. Pour reserved Vermouth mixture over ducks, cover, and let stand in refrigerator for one to two hours, or overnight if desired. To serve, cover and bake at 350° for one-half hour or until heated through. Garnish with orange and parsley if desired.

*Note:* This is best prepared the day before serving, allowing flavors to blend and the cook to rest. Serves 6-8.

**—from Wild Game Cookery  
by Carol Vance Wary**



# young artists page



Geese  
John Frye  
Clintonville, Pa.  
Franklin Area High School  
9th Grade

Mallards  
Joe Skummy  
Kittanning, Pa.  
Shannock Valley High School  
12th Grade



# The Right Time to Shoot

**Scene 1:** The springtime hills of Somerset County. Dawn is breaking. I close the car door, hard, forgetting my husband's warning not to. Immediately from the left of the hollow comes a deep-throated "gobble-obble-obble-obble." We look at each other, eyes wide, and he says, "We've got to hurry. That bird's anxious."

I take my shotgun and we walk as quietly as being quick will allow, up the opposite hillside. It's getting lighter and every few minutes the bird gobbles, seemingly in answer to the dry shuffle of our footsteps. We stop, "I think that bird's moving toward us," my husband says. "We'd better set up here."

He'd already bagged his spring bird, on opening day. This is Monday, only the second day that I've hunted May turkeys. Neither of us knows much about the new sport, and I'm still a greenhorn with only the previous fall's hunting experience. We'd been told to "make a call like a turkey hen, sit tight and shoot straight." It had seemed easy for my husband. I hope it's my turn.

I pull my camouflage net over my face and sit down against a big oak. My husband is guide and caller, and he climbs a little above me so he can coax the bird close without making it

suspicious. At least that's the plan.

I barely have time to settle myself when I hear the bird's footsteps. A gobble rings so clear and close I can't believe the turkey isn't in sight. I shoulder the shotgun, barrel on my knee, and wait. All I have to do is shoot when he shows, which, with the angle of the hill, will be 20 yards at most.

Even so, when the crimson head appears, I'm startled. In the morning sun his wattles are blood-red and the dark plumage is lit with an iridescent rainbow. Behind me the caller yelps, unable to see how near the bird is to me. Below, the big tom gobbles. I hadn't known it would be so loud at close range. The bead of my shotgun covers the gobbler's head.

But he begins to walk the sidehill, nervous, that head moving snakelike in and out of the trees, screened now and then by brush. My heart pounds and my fingers feel numb. When should I shoot? Should I shoot now . . . or now . . . or now . . . or . . . ? I'm paralyzed by indecision and acutely conscious of my dilemma. I follow the retreating head, unable to make up my mind to squeeze and feeling ridiculous. Incredible as it seems today, I let that bird walk away. Was it buck fever, turkey fever, or what?

**Scene 2:** Some years later, on a frozen mountaintop in Lycoming County. It's midafternoon, the second day of antlerless deer season. The snow depth lies, in inches, close to twenty-four, and the temperature's about the same. I'm seated on a snow-covered dirtpile, backed against a laurel bush for cover. The pile is a remnant of some long ago mining and is just high



**KNOWING** exactly when to squeeze the trigger comes with experience. It's a result of judgment that seems to become automatic as success mounts and confidence grows.

GAME NEWS



enough that I can see a few extra yards into the surrounding laurel thicket. The snow there is pockmarked with deer tracks.

Again, I'm the shooter and my husband, successful earlier in the season, the guide and driver. He's somewhere in the greenery, pushing a fat doe toward me, or so I hope. I sit very still, clutching my rifle in orange-gloved hands. Suddenly, ahead of me, a bit of brown flashes between laurel clumps. I intently search the place it disappeared and finally see the flick of an ear as the doe watches her backtrack. The rest of her is obscured by brush. Patience.

The deer moves again, ghosting through the thicket, angling toward me. My gun comes up. I pick an opening where I'll have a clear shot. I settle the scope there.

The deer appears, magnified in the sight. Instantly, the crosshairs find the shoulder. A little more finger pressure and the rifle booms. The deer bursts through the next bush and nosedives into the snow. I've already chambered another round, but I don't need it. I hear my husband calling and know in a moment he'll be as happy about the result of the drive as I am.

Classroom hunter education is the best thing that has happened to the sport in our time. At the end of the course, every new hunter goes away with a background in firearms safety, responsibility and ethics, the social side of the sport. But there's another part, that which the game itself must teach.

In that outdoor class, each student gets a private lesson in how and when and where to find game. The teaching plan is flexible and each individual progresses at his own speed.

But there's another skill to learn, one that is even more to the point. It involves the fact that, apart from the pleasure of just being out there, the logical conclusion to the hunt is the taking of game, the kill. That doesn't have to happen every time, but unless a hunter goes home occasionally with

OCTOBER, 1985

# Another View...

by Linda Steiner

something heavy in the game bag, he'll tire of taking his gun for a walk.

But the taking of game is a Catch 22 proposition. For the more successful a hunter is, the more successful he will be. Confidence in shooting ability, not at targets but at live game, comes with having shot live game. Safety, timing, gun handling, knowing vital areas, and many other things must come together in an instant when the game is moving under the sights, an instant when the mind and hand say "Now!" and the shot is off.

I've heard experienced hunters say it's an instinct. They can't explain how they know the best moment to make the shot. Some say it's "trigger finger knowledge." I'd say it's a skill of judgment that seems automatic, and it's what I hope I've learned something of since that first faltering, self-conscious encounter with the turkey gobbler.

Many new hunters first taste the sport on the small game field. But here the hunters and game are all moving and a newcomer's got to juggle firearm safety, keeping track of his companions and good shooting all at once. It's no wonder that for many, first day is a bust. Instead, I'd recommend starting on squirrels.

The squirrel is a great confidence builder. He's plentiful, will hold tight for a shot, and can be hunted from a relaxed, sitting position. Any hunter who goes after squirrels will probably go home with at least one. It's a way to start recognizing the right time to shoot. Eventually, knowing the precise instant to press the trigger will come easy, but it's really a reward of experience and confidence.



## A TURKEY QUIZ

The wild turkey is Pennsylvania's top-ranked game bird, and yet much of this bird's biology remains a mystery to many of us. How much do you know about this fascinating bird? If you can answer the following questions, you know more than the average person.

Most of the information was taken from the Wild Turkey Wildlife Note, written by Chuck Fergus and published by the Game Commission. It's required reading for all wildlife students—especially if you miss these questions!

1. Is the domestic turkey an offshoot of our eastern wild turkey?

No. Domestic turkeys were kept for centuries by native Americans and were probably developed from the Mexican wild turkey. Spanish explorers returned to Spain in 1519 with domestic turkeys and several of the birds were brought to the New World from England by Pilgrims in the early 1600s. It's ironic that North America's grandest game bird should come back to us in domestic form by way of Europe.

2. Are turkey gobblers and hens about the same size?

No. Gobblers are typically taller, longer and heavier than hens. Hens weigh about 10 pounds, while gobblers go about 16. Some gobblers top 25 pounds, and historical accounts mention birds of 30–40 pounds.

3. Turkey gobblers grow a “beard”—a tuft of hairlike feathers—from their breasts. This beard grows as the bird gets

older. Would the beard be a good indicator of the age of the bird?

No, not a good indicator. Older birds generally have longer beards, approaching 12 inches in length. However, the wear and tear of daily turkey life can cause the beard to break and become shorter, indicating a younger bird than is actually the case.

4. Are turkeys strict vegetarians?

No. They eat a variety of small animal life such as grasshoppers, spiders, beetles, snails and caterpillars. However, the bulk of their diet is plant life. They eat buds, flowers, berries, nuts, tubers, leaves, roots and stems of various plants. Animal life accounts for less than 15% of the turkey's diet.

5. Acorns are important turkey foods. But how do turkeys eat them? Do they:

- a. Peck them open and eat the kernel?
- b. Crush them with their beak, swallowing the kernel and dropping the shell?
- c. Swallow them whole?
- d. Eat softer, young nuts?

Turkeys swallow the whole acorn. It is stored for a time in the bird's crop, where the shell is softened. It then passes into the muscular gizzard. Here the nut is ground into digestible bits.

Gizzards are capable of amazing forces and some very old experimental work provides the most dramatic examples. In 1752, one researcher reported that a tube of sheet iron was flattened and partly rolled after being in a turkey gizzard for 24 hours. Another reporter, 1783, found that



turkey gizzards could grind surgical lancets and steel needles into small pieces. Grinding entire acorns is no problem!

6. Do gobblers and hens mate for life, as some other large birds do?

No. Gobblers are polygamous—they mate with many hens during the same season. Gobblers are not involved with nest selection, brooding or rearing the young. In fact, the hen receives enough sperm from just one mating to fertilize the eggs for her entire clutch. After that mating, the gobblers work is done and, for the most part, he remains separate from the hens and young birds.

7. How many eggs do turkeys lay?  
A clutch of a dozen eggs is typical, although there is some variation. Nests with as many as 20 eggs from the same hen have been found. Also, hens sometimes share nests. Several hens might lay eggs in the same nest and then take turns brooding them. Turkey eggs hatch after 28 days of incubation.

8. How do the tails of young turkeys differ from those of adults?  
The fanned tail of an adult bird forms an unbroken, curved edge. Young birds, those hatched just that year, have middle tail feathers longer than the rest.

9. Why do turkeys make the sounds they do?  
Turkeys communicate with a language of their own. Like the songs of most birds, turkey calls generally attract a mating partner, advertise a claim to territory, or serve as alarm notes to warn of potential danger. But because turkeys are birds that flock together, they also have notes that help them find each other when separated.

Hunters take advantage of these behavior patterns in several ways. One hunting method is to find a flock of turkeys and to spook them so they spread out. Then, the hunter hides and clucks the assembly call, hoping a returning bird will come close enough for a shot.

The second method takes advantage of the gobbler's mating drive. In the spring season, hunters woo excited gobblers by making sounds like a willing hen ready for mating. Or, in some cases, the hunter might gobble a challenge to a nearby male, hoping he will come in ready to do battle to protect the territory, and hens, he considers his own.

OCTOBER, 1985

10. What regions of Pennsylvania support the best turkey populations?

The mountains of the northcentral counties and the hardwood ridges of the southcentral portions of the state boast the best turkey populations. These areas are characterized by mature hardwood forests that provide the year round food and solitude required by this magnificent forest bird. Turkeys also need forest clearings where increased sunlight supports the growth of weedy plants, fruit-bearing shrubs and multitudes of insects. In winter, small mountain springs are important feeding areas where the water remains unfrozen and provides a haven for small plants and animal life.

## An Example Worth Remembering

Sometimes, for those of us concerned about the welfare of wildlife on this planet, it seems that nearly all species are sliding downhill toward extinction. That's not true.

There are those species that are making strong comebacks and are once again claiming areas where suitable habitat has re-established itself. The eastern bluebird and the wood duck are good examples of what can happen when enlightened management and personal initiative combine for wildlife's benefit.

But the wild turkey is just as good an example. In fact, it might be a better example because its historical population problems go back so much further.

Consider this report of Thomas Morton, 1637:

"Turkies there are, which divers times in great flocks have sallied by our doores; and then a gunne, being commonly in redinesse, salutes them with such a courtesie, as makes them take a turne in the cooke roome."

Other accounts indicate wild turkeys were nearly pests as they fed too near to the farmyard. But their decreasing numbers were soon noticed as market hunters and trappers took a heavy toll and as forests were cleared for farms.

In 1672, John Josselyn wrote:

"I have also seen threescore broods of young turkies on the side of a marsh, sunning of themselves in a morning betimes. But this was thirty years since, the English and the Indians having now destroyed the breed, so that 'tis very rare to meet with a wild turkie in the woods."

The wild turkey population was decimated throughout large areas of the Northeast in those early centuries. It held on where habitat was the best—and least accessible to humans. One estimate holds that, by 1900, only 5000 turkeys remained in Pennsylvania.

The Game Commission set up refuges and gave this bird protection. But probably the two most important reasons for the expansion of this bird's range have been the trap-and-transfer of birds into new habitat and the natural migration of birds into forest areas nearing maturity. Turkey populations had to withdraw dramatically

as the lumber axe swept across Pennsylvania in the 19th century. Many of those forest areas are now nearing a century of growth and once again provide the kind of food and cover turkeys need. Some birds naturally migrate into such areas while others have been released there by the Game Commission.

Today, more than 100,000 birds make up Pennsylvania's turkey flock. That's still a lot less than settlers saw in the 1600s, but it is more than we had in the past century. The eastern wild turkey has come back, thanks to management and the support of sport hunting.

---

## *Books in Brief . . .*

(Order from publisher, not from Game Commission)

**The Knot Book**, by Geoffrey Budworth, Sterling Publishing Co., 2 Park Ave., NYC 10016, 160 pp., \$9.95, softbound, \$5.95. Master one of the most useful outdoor skills by following this book. Over 100 of the best knots to use at home, on the road, in the field and on the water are illustrated and explained step by step.

**Boone and Crockett Club's 18th Big Game Awards 1980-1982**, edited by William H. Nesbitt, Boone and Crockett Club, 205 South Patrick St., Alexandria, VA 22314, 306 pp., \$27.50, delivered. The first B & C records book devoted exclusively to a single three-year entry period. All the records accepted during the 1980-82 entry period are ranked. Over 1000 trophies—including five new world records—in 27 categories are listed. Personal accounts by the 68 award winning hunters make up most of the book.

**NATURE BOUND Pocket Field Guide**, by Ron Dawson, OMNIgraphics, Ltd., 520 W. Franklin, Boise, ID 83702, 335 pp., softbound, \$12. This neat little survival guide is chock-full of good information to make outings safe and more enjoyable. Fire and shelter building, finding food and water, and using a map and compass are just some of the subjects covered. Over half the guide is devoted to plants. One section covers those that are edible, and includes their preparation. Another covers poisonous plants and includes treatment procedures. Only 4½ x 5 inches and durable, it fits easily into pocket or pack, and will withstand lots of use.

**Grand Slam Water Trapping Methods**, by Dan Kroll, Spearman Publishing and Printing, P.O. Box 550, Sutton, NE 68979, 78 pp., softbound, \$6.36. Good practical information for trapping muskrats, beaver, mink and raccoon. Many photographs and illustrations. This book will appeal to both novice and veteran trappers.

**Shooter's Bible**, No. 77, Stoeger Publishing Co., 55 Ruta Court, S. Hackensack, NJ 07606, 575 pp., softbound, \$12.95. As always, a tremendous catalog section with specifications on countless rifles, shotguns, handguns, and related shooting equipment. Articles this year include a short history of Remington Arms Co., by Alden Hatch; detailed information on scope mounting, by Don Lewis; astute observations by Don Zutz on British gunmakers—the unyielding traditionalists; and Stan Trzoniec's "The Sako Rifle: a Shooter's Choice." Lots more, too, including the Gunfinder Index and a new Caliberfinder.



**O**CTOBER is synonymous with the beginning of fall and the official start of our busy law enforcement season. Night-time frosts and shortened day length give the leaves their characteristic autumn coloration as the opening of archery season approaches. Squirrel hunters are eagerly anticipating the opening of their season and hoping that wind and rain will bring down enough leaves, opening visibility in the forest sufficiently for an occasional clear shot at a bushytail. Night patrols, down vests, and thermos bottles of steaming black coffee again become parts of the game protectors' daily lives.

*October 2*—I spend several hours checking impoundments for the annual waterfowl survey that the Game Commission conducts in cooperation with the U.S. Fish and Wildlife Service. After that I attend a Rotary meeting and salt down several deer hides before heading home.

*October 4*—After several weeks of investigation we have finally obtained sufficient evidence to get a search warrant for a residence occupied by the people we suspect of having shot several deer in the vicinity of Moore Hill. Deputies John Schatz and Danny Brehm, State Troopers Neil Deibler and Randy Schlimm from the Emporium Barracks, and I search the house. We are surprised to find not a scrap of meat in the freezer, but as we continue the search two sets of fresh deer antlers are discovered, a 7-point and an 8. We advise the occupants that as deer season does not open until the beginning of archery season in two days, they are as guilty of possessing any part of a deer as they would be of having the entire carcass.

They realize they have been caught and tell us one of the most bizarre stories we have ever heard. The scenario began a year before when members of the family had been out on a nighttime deer shooting spree. Fish Commission officers Stan Hastings and Gary Brown, assisting me, attempted to stop their vehicle and were nearly run over for their efforts. The gang was finally rounded up. The shooter, who was not a member of the family, was fined \$400 for killing two deer. The driver paid a fine for failure to stop upon demand of an officer, and lost his hunting privileges for a year.

When the certified letter from the Com-

*OCTOBER, 1985*



**By Joe Carlos**

**District Game Protector  
Cameron County**

mission arrived the following summer, nearly a year later, the driver became so enraged at losing his license that he decided to get even with the Game Commission by shooting deer and letting them lay. In addition to the 7- and 8-points for which he was fined \$400, Fish and Game Commission officers had confirmed that an additional four deer had been killed in the days prior to our search.

We ask him where the carcasses of the two deer had been taken, and he leads us down a path approximately a half-mile to where the remains are found. He tells us that the deer had been shot at night several miles from home, and then transported to his house with "one in the turtleback and one thrown over the hood." There the deer were unloaded and dragged behind a three-wheeler to their final resting place. The antlers of both deer were then chopped off and taken home.

That last act of egotism gave us the only solid evidence we had to tie him to the crime. Although he admitted in his own words that the 7- and 8-points "were not the only ones" he had killed, there is no evidence to tie him to any additional wasted deer. We observe the remains of several other deer on our half-mile trek through the woods, but again are powerless to bring charges.

*October 5*—My wife Anna and I attend a luncheon and dedication ceremony for



the newly erected Vietnam Veterans Memorial. I am reminded of an earlier time and place and a different uniform which I wore in the late 1960s.

Afterwards, Deputy Game Protectors Rawley Cogan, Danny Brehm, Trooper Ron Luckenbill, and I serve another search warrant, this time near the village of Gardeau. We find deer meat from a roadkill for which no one has obtained a permit as required by law. The head of the household is fined \$100 and the meat confiscated.

*October 6*—Opening day of archery season, and Deputy Brehm and I are on duty long before daylight. We are watching a buck standing about 70 yards from the road when a vehicle comes to an abrupt stop, the passenger gets out, and shoots an arrow across the road at the deer. Needless to say, at that distance it is a clean miss, but the culprits are quite surprised when two game protectors, who were close enough to hear the bow string twang, emerge from the brush.

Danny has to work at his regular job in the afternoon, and I drop off Deputy Bill Smith to watch a baited tree stand. Then I pull into the Brooks Run Ranger Station to turn around. As I do so, a man dressed in camouflage clothes but carrying no bow emerges from one of the outbuildings of the abandoned station and calmly walks into the woods. Investigating, I discover the reason for his retreat—a crossbow cocked and ready, hastily hidden in the building. A window has been raised from which to shoot and a deer is still grazing in the yard.

A quick call on the radio brings assistance from Deputy John Schatz, who picks up Bill Smith on the way, and a temporary roadblock is formed. Shortly after dark, we stop a woman who is cruising the area, looking for her boyfriend. She admits he

was archery hunting in the area. His description matches the man I observed earlier.

The hours drag on, and neither her boyfriend nor the violator is found. I call the State Police and the Bucktail Search and Rescue team for assistance. Deputy Bill Olivett is also a bloodhound handler for the Search Team. Using a scent article provided by the woman, it is confirmed that her boyfriend and my Game Law violator are one and the same person, and that after leaving the building he circled through the woods back to the road where he was evidently picked up by an automobile. More than mere coincidence.

Later, State Trooper Nelson Haas discovers a legal compound bow secreted in the building, and the game plan all falls together. Evidently the hunter was going to kill the deer in the yard with the illegal crossbow, remove the bolt from the carcass, substitute a legal broadhead, and drag the deer to the roadside where his accomplice was waiting. When I pulled in to turn around, he panicked and gave himself away.

The man and woman are seen leaving camp together the next morning and are subsequently contacted. The man returns the next weekend and pays a \$400 fine to me on a field acknowledgment of guilt for attempting to kill a deer with an illegal device and resisting inspection. His accomplice is later found guilty on interfering with a state officer in the performance of his duty, for transporting a known fugitive out of the search area. She is fined \$200. All in all, a pretty expensive Bonnie and Clyde weekend.

*October 8*—It is a state holiday, Columbus Day, and I take advantage of the time to catch up on my DGP Diary.

*October 9*—I file citations and warrant returns at District Justice Alvin Brown's office.

*October 10*—Danny Brehm and I are out again early, watching a group of deer. The morning is uneventful.

*October 13*—George Mock, one of the Game Commission's firearms instructors, is unable to participate in a scheduled deputy training course at Scotia Range, so I pinch hit for him. It's a 15-hour day and the Cameron County deputies are



working a routine night patrol when I get back.

*October 18*—All the deputies are at the Cameron County land fill for our last crack at bear research this year. In addition to myself, also included as instructors are Wildlife Technician Rawley Cogan and longtime bear expert Charlie Baker. With our supervision, the deputies do all the work, from setting culvert traps to snares. Then John Schatz, Rawley, and I build a blind out of bags of garbage. Except for the smell, it's almost like the snowhouses we all built as children. Rawley and John are armed with dart guns with dosages for different size bears, and I have the police shotgun loaded with rifled slugs just as a safety precaution. A free roaming bear comes to within 15 yards of John and presents a perfect broadside shot. When the hammer falls, the gun goes "click," and the startled bear runs off. The propellant charge is evidently a dud and has cost us the only shot of the evening.

*October 19*—Back at the dump this morning to discover we have caught two bears. John completely processes one, from administering the drug to weighing the bruin and applying the ear tags, and Danny Brehm does the other. Although these two officers are fully capable of handling bears on their own, they will continue to serve in apprenticeship for at least part of the next year. All the extra training and work these men have been through is going to start paying big dividends soon, and I am reminded of an old motto: "The quality of a captain can best be measured by how well his ship runs without him."

*October 20*—I patrol with John Schatz during the day and Bill Smith at night. The day is without incident.

*October 24*—Danny Brehm and I are called back to Sizerville on beaver complaints. We have caught one beaver and I relocate it in an area of Mix Run.



#### Question

May a Game Protector or a Deputy Game Protector go upon posted land?

#### Answer

Yes. The Game Law provides that he may go upon any property outside of buildings, posted or otherwise, in the performance of his duty.

*October 25*—I'm tied up all day at the sectional meeting. In the evening my wife Anna and I are guests of County Agent Rod Keniston at a dinner meeting of the Agricultural Extension Service held at the Emporium Country Club. After the meeting I reset the beaver trap near Olivett's ball field in the headlights of the vehicle and a pouring rain.

*October 27*—I work law enforcement patrol in Shippen Township during the day, attending a meeting of the Sinnemahoning Sportsmen's Club in the evening, then joining the deputies for night patrol near Moore Hill. We want to assure ourselves we have put a stop to the deer shooting spree that took place in that locale earlier in the month.

*October 29*—Instructors Ron Luckenbill, Dominick Dagustine, and Nelson Haas hold a trapper education course this evening and I assist. The class is to be given in two halves. Tomorrow night Deputy Bill Olivett will represent the Game Commission by discussing trapping laws.

---

## 'O'O Who?

Hawaii's island of Kauai is the last home of the nearly extinct 'o'o, a forest bird whose yellow feathers once were used to make the cloaks of the Hawaiian chiefs.

# Thornapples



Chuck Fergus

“WHAT ONE piece of advice would you give to someone who wants to become a successful deer hunter?”

I asked this question of nine veteran deer hunters. Together they have hunted over 400 seasons in the Eastern woods; together they have killed almost 400 deer. They have also spent countless hours scouting, watching, and learning about the whitetail deer. I asked them to answer from the point of view of the hunter who does not sit all day waiting for a deer to come past, but rather the hunter who stalks slowly through the woods in search of a buck—the stillhunter. I decided to answer the question, too. My initials come first.

“What one piece of advice would you give to someone who wants to become a successful deer hunter?”

*C.F. Treat every bush like there's a buck behind it.*

I remember one time when I hunted all day, really doing my best. There was snow on the ground. I would move a little, then stop and wait and look and listen. I would work my way into a hollow, and tell myself: A buck is lying in there. Then I'd go slowly, all eyes and ears, ready to get the gun up in an instant. I would look down onto a bench, and think: A buck is feeding

down there. I'd wait and watch, look for motion against the snow, and never let my thoughts drift away from deer.

I saw deer. A doe and her fawn fed right past me. I stayed still—I try never to scare a doe, because a buck may be behind her. I hunted hard all day. It was almost quitting time, and I was beat. My legs were tired and my arms ached from holding the gun. I came to this patch of laurel, and forgot to tell myself: A buck is lying in there. I walked on through. On the other side I found a bed with fresh tracks leading out of it. Later that year I managed to shoot a doe in the same area. She was traveling with a buck, a nice 6-point.

*L.S. Look and listen more than you walk.*

I learned that early, from my father and my uncles in the Poconos. When I started hunting, I used to see a lot of deer—mostly tails. Everybody else would kill bucks. I saw more deer than they did, but I never got any shooting. Then I figured things out, and slowed down. I learned how to move: Take a few steps, stand, look and listen for fifteen minutes, take a few more steps, stand.

The listening, for me, is as important as the looking. I usually hear a deer before I see it. I listen for a twig snapping or leaves rustling or branches rattling. I remember once I'd been standing for about fifteen minutes and was just ready to take a step, when I heard a twig snap. Two does and a buck, moving a little faster than I was.

*D.S. Don't just look, learn to see.*

If you spend time in the woods, you'll get a good feeling for what empty woods looks like. Then if something appears out of place, you'll stop and really try to see it. I'm talking about form—an ear, a foreleg, a rounded-off rump, a horizontal back in a stand of saplings. Color—a patch of tan in the laurel, where it doesn't quite belong. And motion—that's a dead giveaway.



I've got a story about how it pays to really see. I was hunting up in McKean County. There was snow on the ground, and it was bitter cold. I noticed a stick up ahead. But there was something odd about the way that stick forked. I saw, then, that it was an antler; the rest of the deer took shape. I leaned against a tree, aimed, and pulled the trigger. But the gun didn't fire. The firing pin just kind of eased down—must have been oil in there, gummed up by the cold. The gun was a 35 Remington pump, a hammerless. That meant I had to work the action to cock it again. I pumped fast—but that buck was out of his bed and down the mountain before I could get off a shot. He didn't even look back.

One more thing: Hunt from above. Don't try to hunt up a hill or a mountain; it won't work. On sloping terrain, deer lie facing downward. Get above them and hunt along the ridge, now and then going to the edge and looking over. My brother calls it sneaking and peeking. I call it scalloping the ridge.

#### B.B. *Watch the wind.*

I've always believed that scent is the biggest defensive weapon for a white-tail deer. There are lots of noises in the woods, and no matter what you do a deer will often hear you. A deer sees incredibly well, but at times he will look at something and not realize it's dangerous—a hunter backed up against a tree that breaks up his silhouette. But when a deer scents you, that's it. Then he knows you're there.

Moving air—wind, breeze, warm air rising as the sun heats it—carries scent to a deer. Hunt high in the mornings when the air is warming and rising; hunt low in the late afternoons when the air is cooling and sinking. Get a general idea of what the wind is doing, and try to hunt into it.

Don't take it to extremes. When I was a kid, about twelve years old, I got the idea that you always had to hunt into the wind, even a swirling wind. One time I spent the whole day walk-

OCTOBER, 1985

ing around in circles—not very big circles, either—trying to keep the wind in my face.

#### W.H. *Hunt upwind.*

You can't do anything with a deer, trying to get at him downwind. Remember, a deer is a patient thing. In a suspicious situation he'll outwait a man every time. So patience is a virtue in stillhunting; and sometimes you can pull a trick or two.

I remember hunting above a bench on the mountain. The wind was blowing up the mountain, from my right to my left. Actually, it was coming from behind me a little, but it was blowing on over the top, and I was looking for the deer to be down on the bench, so I didn't figure the wind would take my scent to them.

I heard noise below and in front of me, in some thick brush. It was deer. Too thick to see them, but I could hear them moving ahead and turning up the mountain, through a little cut that led to the top. If they kept feeding in that direction, it would bring them into my scent. So I picked up a stone about the size of a baseball and threw it as far as I could, upslope of where



the deer were headed. When the stone hit, everything got quiet. I heaved another stone in the same place. The deer ran back down to the bench, and turned into the wind—deer will invariably do that—which brought them directly below me. There were two, a doe and a nice buck. I shot the buck.

*D.K. Take advantage of the wind.*

Deer can hear real good, and they can see, but their best ally is scent. To outsmart deer, you should know how to use the wind. There are two main ways.

The first is to hunt into the wind. Move slowly, keeping your eyes roving on an outer perimeter. Don't look only 100 yards ahead, but also as far away through the woods as you can possibly see. Binoculars help.

The second way is to hunt *with* the wind. You tell a lot of fellows that, and they'll laugh at you. But hunting with the wind can be an effective way to kill a buck, especially a smart old buck. You see, you want the deer to wind you. A big old buck won't be pushed, he won't run away from you—to do that he'd have to run with the wind himself, and that could take him onto another hunter. So when you're still maybe 200 yards away, he'll sneak off to one side or the other and wait for you to pass. When I hunt with the wind, I look for a little hump of elevation with some brushy cover, off to one side of my route about 75 or 100 yards away. If I'm walking along a slope, I pay particular attention uphill, because a buck is more likely to watch you from above.

When I spot a likely place, or if I think I see a deer, I don't stop and stare—that would break his nerve and he'd bolt. I usually shuffle my feet a little, then get my gun up. I've killed several big bucks that way.

Stillhunting is the fairest way to hunt deer. It's one on one, you against the deer. Generally he'll win. But when you win, you'll get real satisfaction.

*T.K. Look for deer where you least expect them.*

A deer can hide in a little patch of brush—ten feet across—that you wouldn't think would hold a rabbit. You'll walk right past, and he'll never budge.

I remember a hunt many years ago on the last day of the season. My father and I were hunting my granddad's farm in Forest County. There was this brushy corner, about an acre and a half, between an open field, a lane, and a township road. Dozens of guys had walked past this little triangle, they'd eaten lunch in their cars right next to it, they'd made all kinds of racket.

Dad wanted to hunt the corner. I told him he was crazy—no buck would ever sit in there. He told me to go ahead and mess around in it. He stood on a little skidroad where my granddad had hauled some logs out for the chemical-wood plant. I walked around for a while between the stumps. Then I heard a crash right in front of me, and I saw this track—a huge deer track—in a pile of sawdust next to a stump.

I think I yelled, but I didn't have to. I heard Dad's rifle crack. I beat it on over, and asked if he'd gotten the deer. He said he ought to be lying over there in the field. I ran on down, and there he was; that buck had 17 points.

Another time I was in the woods after a heavy snow. I was sneaking along, the footing was nice and quiet, and I stopped maybe 30 yards shy of this snow-covered log. I looked at the log. There were two little white things just barely sticking up over the snow. I got a good rest on a tree, and coughed. Up came a rack of antlers, and a deer's head. My shot took him in the white spot just under the chin.

*J.S. Be alert.*

If I had to sum it up, that's what I'd say. Move slowly and stop often. Look ahead, to the sides, and occasionally behind you, because sometimes a buck will let you pass and then sneak away



down your backtrail. Don't ever let your guard down—as soon as you do, you're just taking a walk in the woods.

Alertness pays. Like the morning I was hunting after a snowfall, and I noticed where a buck had rubbed a sapling with his antlers. There was fresh bark peeled off and lying on the snow, and fresh tracks. I started following.

I had gone maybe a quarter of a mile when the tracks started to turn. It looked like the buck was going to circle, like he wanted to stay in familiar territory. By then it was clear that I wouldn't walk up on him; I think he knew someone was following. So I went back to where I'd first picked up the trail. I waited on a crossing nearby. In about half an hour, back he came. A big-bodied deer, with 7-point rack.

*F.L. Be unobtrusive.*

Don't disturb the woods. A deer is a keen animal, and he'll pick up anything out of the ordinary.

Go into the wind whenever possible. Go slowly. It takes me an hour and a half to cover half a mile. I watch where I step so I don't make noise. I go 20, 30 yards, and then I sit, or get up

against a tree, and wait and wait and wait.

I take a lot of care about my clothing. I have to be warm and dry, especially on rainy days or in a wet snow, excellent times to hunt because you can go so quietly. I wear mostly wool and cotton—quiet fabrics. On my hands I wear plain brown jersey gloves, gardener's gloves. They're thin, so it's easy to work the safety and get my finger inside the trigger guard. I actually hunt most of the time with the gun slung over my shoulder and my hands in my coat pockets—my hands stay warm, I can always get ready for a shot, and I'm more apt to take the time to make a good shot. I never take a snap shot at a running deer.

You know what gives a deer away most often? A flick of the tail. It's an unconscious habit for them. Watch for that quick little motion. You have to see a buck before he sees you, if you want to get him.

*N.S. Never give up.*

If I've learned one thing over the years, it's that they never kill the last



one. I've gotten bucks at the tail end of the season, and I know other hunters who have taken last-day bucks; and many of them were nice bucks, too.

I learned my lesson thirty-five years ago. It was the last day of season, with a crusty snow that you couldn't walk on without crashing through. I sat all morning and didn't see a thing. In the afternoon I started to move. By sneaking along on some bare rock ledges, I found I could move fairly quietly. And I walked right up on a buck. He had a deep, heavy body and a classic rack, probably 8 points but with high tines and a tremendous spread. I can still see those antlers swaying from side to side as he nipped off twigs.

He was about 100 yards away. There was a lot of saplings and leafy oak brush in between us, but I couldn't get any closer, couldn't even move to take a rest for my rifle—the crunching snow would have given me away. I had to shoot from a crouch, to miss some brush. At the shot he lifted off the ground and was gone in a couple of

flowing bounds. I followed his tracks all the way down the mountain. No blood, no hair, no drag marks, just tracks in the snow. I went back to where I'd shot. My bullet had splintered two twigs and a small sapling, more than enough to cause a miss.

I think of that buck often—especially late in the season.

One of the other hunters questioned also explained why he never gives up.

T.K. It was the last day of the season, and a terrible day to hunt—windy, dry, and noisy as all get-out. I hadn't seen a deer all day. It was late afternoon, and I decided the season was over.

I slung my rifle and started walking. I was most of the way back to the car, scuffling along like a kid, kicking leaves, when I happened to look up. There was a buck. He was scuffling along just like I was. I had venison that year. Didn't deserve it, but I had venison.



OTIS SKED and GUS NEIMEYER made quite a haul around the turn of the century on a hunting trip to the Laceyville area of Wyoming County.





**EARLY morning and late afternoon are unquestionably the best times for archery hunting, but by borrowing a few techniques from the riflemen, bowmen can stretch their sport into an all-day affair.**

# ALL-DAY DEER HUNTS

**By Keith C. Schuyler**

**Photos from the Author**

**Y**OU WILL sometimes get conflicting opinions on whether it pays to hunt all day with the bow for deer. But no knowledgeable hunter will dispute the fact that early morning and late afternoon are the two best times to get shooting, as that is when these animals are moving of their own volition.

It is true that deer will move around a bit during the day, particularly in more remote areas where they are not likely to meet up with a dog, person, or some other threatening situation. In winter they must move occasionally on cold days simply to keep their circulation going. But chances of getting a shot with the bow under such circumstances are minimal. Those who seek out resting deer *may* come upon them by utilizing utmost stealth—fre-

quently difficult under autumn conditions.

So, you plan vacation days to coincide with the October archery season and actually have only a relatively few good hours out of those legally available in which to hunt. Using October 14 as midway in the upcoming season, we find there are really eleven hours and thirty-six minutes of hunting time on that day—roughly the average per day throughout the twenty-four open days.

If you hunt just the prime two and one-half hours at the beginning and the end of legal hunting time, that leaves six and one-half hours, more or less, that are largely wasted. This assumes you are hunting alone or, preferably, with a buddy or two. And you



are utilizing ground or elevated stands.

There is a way to combine this solitary, sometimes sedentary, type of hunting with the time-honored and frequently effective method of group hunting. Actually, hunting in cooperation with those of like mind predates written history by countless years. This system has survived somewhat to the present.

You can double your *good* hunting time by teaming up with other bow hunters. Not only do you increase your likelihood of scoring on a deer, but there are also such things as companionship, conviviality, and a chance to learn from others as well as to make a personal contribution. Ideally, a hunt of several days to a week from a private cabin or hostelry, public or private, will provide the maximum opportunity for all such pleasurable supplements to the basic hunt.

### Expanded Horizons

This was a common scene back in the days when transportation was limited to railroads and horse-drawn conveyances. Just getting to and from the hunting area was an accomplishment of major proportions. As the automobile came on, hunting horizons expanded along with roads. But, in the earlier days, it was usually necessary to travel long distances to the best hunting. Family members and friends teamed up to comb such areas for the elusive and yet not abundant deer. Today, all this has changed, except that group hunting is still effective and enjoyable. There remains the problem of running into other hunters who take advantage of the greatly expanded deer herd to go it alone, but all the other values are intact.

Two approaches have proven more or less effective for those with whom I have hunted. One is to encourage everyone to go to his own favorite spot at whatever time suits, for a morning stand. Then all get together at a designated time for the group hunt. The other approach is to physically set up an early drive in an area where deer are expected to funnel through from their nighttime meanderings. There are advantages and disadvantages to each system.

In the first approach, hunters station themselves along runways where deer will be moving from lowland feeding areas. Obviously such spots are familiar to these hunters and represent the best chances for success. Here is where they might normally hunt alone until the sun sends them home. But they can employ whatever assist turns them on, such as ladders or treestands or good ground cover.

But there must be a specific time at which they will get together with the rest of the group to hunt during the normally less productive hours. They must leave their stands so they can rendezvous on time—usually around 8:30 or 9 a.m.

There can be problems. Unless time is marked religiously and they know within minutes how long it will take them to meet the other hunters, they can be late. This causes irritation, which has no place in what is intended to be a pleasurable group hunt. This is especially true if the roster has not been drawn up in advance, and more time must be taken to satisfy this legal requirement.

In addition, there is the mixed blessing that comes with someone making a hit. Even an immediate kill requires time for field-dressing, tagging, getting the animal to a vehicle, and deciding what to do with it—particularly if the weather is warm. Certainly the main group shouldn't be kept waiting without word as to what has transpired. Unsuccessful hunters will be expected to join in the midday hunt regardless of circumstances.



**PLANNING** is important, and all participants must adhere to the plan for it to be most productive. Contingency plans should also be made in the event somebody gets a deer or needs help.

Consequently, it is important that all eventualities be considered before the main hunt, so that others are not inconvenienced. Do you leave the hunter who has made a hit to wait it out and trail the animal by himself, and come back for him at a designated time? Do you leave another hunter with him? Just be certain that there is a prior understanding so the integrity of the group is not compromised.

The group may plan to disband at a pre-arranged time in the afternoon so that, once again, each member can seek out a spot to finish the day, as he started it in the morning. All sorts of contingency plans might be included in such a hunt, depending upon whether it is a one-day deal or up to a week. Most important is that there is a *plan*, and everyone is properly informed in advance.

In the other approach, wherein an early drive is set up, it is again important that everyone know just what is expected. The drive might be loosely arranged so that each hunter can find a spot where a deer is likely to appear, whether he is a driver or a stander. But there must be a time set at which the actual drive is to begin. This enables all to be in position for whatever part they have in this stage of the hunt.

Again there is the happy problem, although much less difficult to work out, when someone makes a hit or an instant kill. It is up to the captain of the group to spell out procedures; it is up to the rest to respect his decisions and to make his job as easy as possible. It is a considerable responsibility to properly manage a hunt. The captain should be someone of experience and



one who is completely familiar with the territory designated for the hunt. He can save a lot of time and increase the probability of success by proper organization.

In any group hunt, aside from the advantages already outlined, there are additional plus factors. Deer which have bedded down for the day can be moved to waiting hunters. In the event of any personal physical problems, immediate help is available. If there is difficulty in finding an animal which has been hit, extra trackers might be spared. Or a drive can be set up in the general area to locate it.

It is true that deer, improperly driven, will speed through the drive or squirt out the sides to provide improbable shots. Hunters may become uncertain of their positions (lost) or wander off their designated courses. Some may get noisy, or walk too fast, or sprain ankles, or whatever. But the effort that goes into a well-run group hunt is generally worth it, whether or not anyone scores. If you choose an occasional poor hunter, he will probably be better for the experience. In a well-run hunt, there will be more enjoyment than aggravation.

And that's what it's all about.



YOU can learn a lot about your shotgun and your shooting by spending just a little time on the range, patterning your gun at a variety of distances.

## Thoughts on Shotgun Patterns

By Don Lewis

Photos by Helen Lewis

“WHAT DO YOU think of this pattern?” Russ Whittaker asked, shoving a riddled piece of cardboard under my nose.

“Looks pretty much like a one-holer,” I commented. “What did you shoot it with, and how far?”

“The new 1100 Remington 12-gauge Magnum turkey shotgun. I fired a 3-inch Federal Magnum shell at 15 yards. It’s stuffed with 1 $\frac{7}{8}$  oz. of number 6 shot. You’ll have to admit that 95 percent of the pellets in a nine-inch circle is a tight pattern.”

“I’ll buy that any day,” I answered. “But since you’ll hardly be shooting all your shots at 15 yards at called-in tur-

keys, what results did you get at longer ranges?”

“At 25 yards, the basic pattern measured 14 by 18 inches and contained 370 pellets. Three shots at 40 yards gave an average of 360 pellets in a 26-inch circle. That’s about 85 percent in an area a lot smaller than the traditional 30-inch circle. Although Remington designed this outfit for the turkey hunter, with the dense pattern it gives, it will sure make a super long range pheasant outfit.”

The new Remington that Russ was excited about is called a “Special Purpose Magnum.” Parkerizing the 12-gauge Model 1100 gives a non-glare

GAME NEWS



finish on the barrel and receiver, with the bolt and carrier colored a dull, non-reflective black. The stock and forearm have a dull oil finish. The stock doesn't have exactly a rough finish, but it's not a completely smooth one either. There are no shiny frills such as whiteline spacers to flash a warning to a wary turkey.

The same general design is available in the M 870 pump as well as the 1100 autoloader. They come with 3-inch chambers, full choke only, and a choice of either 26- or 30-inch barrel. The new turkey outfits are equipped with padded Cordura slings, in camo color.

What about the dense pattern Russ fired with the Model 1100? Putting 360 pellets in a 26-inch circle at 40 yards indicates this full choke turkey outfit produces very tight patterns, but there is more to the makeup of a pattern than meets the eye. At first glance on the patterning paper, it does appear nothing could escape at 40 or 50 yards. However, what you see on the patterning paper is not a true picture of the pattern's makeup at long ranges.

When a shot charge moves through the bore, some pellets will be deformed by rubbing against the barrel inside the shot charge. Deformed pellets play an important role in the makeup of the shotstring after the charge breaks free from the muzzle.

The shotstring is an elongation of the shot charge along the line of flight. In other words, the shot charge starts to "string out" immediately after leaving the muzzle, and grows longer as the range increases. This stringing is caused in part by deformed pellets slowing down faster than round ones. The advent of the plastic shot cup some years ago greatly reduced pellet deformation in the bore, but didn't eliminate it.

So, shot stringing takes place. But it doesn't show up on the patterning board. Many shotgunners visualize the shot pattern in the form of a saucer growing wider but not longer as it moves through the air. Actually, the

*OCTOBER, 1985*



shot charge can be visualized as an ice cream cone, small end at the front. It strings out to perhaps a length of 15 feet at 50 yards, which means that not all the shot hit the patterning board at the same time.

To the eye, the pattern is even and full on the target. But if its creation could be seen, it would be noted that the pattern is formed in layers or groups. First, perhaps a half-dozen pellets hit, then a dozen more, and so on until all pellets in the shotstring have registered on the patterning board. It's easy to see now that on a very long shot, if the first group of pellets centers on a crossing pheasant or dove, a good portion of the rear of the shotstring would go behind the speeding target. On the other hand, a long shot string would theoretically aid the shooter when too much lead is used on an exceptionally long shot. While the first part of the shot string missed, the target might be caught in the trailing portion.

The center of the pattern tends to have the highest concentration of shot, but on a patterning board there may be a good concentration of pellets on the periphery too. This can be misleading. On paper, a hole is a hole. There is no way of knowing if the pellets on the edge of the pattern have the same velocity and kinetic energy as the ones in the center. Nor do we know exactly when the outer pellets arrived. Personally, I think many of holes in the periphery are made by deformed pellets which lack velocity and energy for deep penetration and shocking power on long shots. In other words, I'm not convinced wide ranging pellets make a significant contribution over extreme ranges.

A short shotstring has distinct ad-



**FOR MOST** small game hunting, shotguns should be patterned at 25 yards. Right, a 25-yard pattern from the Ithaca Turkey Gun and Federal's 3-inch magnum loaded with No. 6 buffered shot. About 32 pellets hit the 3-inch bull and most of the charge went into a 15-inch circle.



vantages over a long shotstring. This is one advantage steel shot has over lead. Since steel pellets are more spherical and are not subject to deformation when passing through the barrel, the shotstring is shorter, not as wide, and has a higher velocity. With a shorter shotstring, more pellets will normally hit the target.

The size of the pattern is controlled to a great extent by the degree of choke in the muzzle. There is much disagreement over which choke is best. A large segment of shotgunners believe it's impossible to have too much choke.

### Chokes

Choke is a slight constriction in the forward part of the barrel. The more constriction, the higher degree of choke. In this country there are three common chokes—improved cylinder, Modified and full. The IC boring has far less constriction than the full choke, and modified falls between them. Choke acts somewhat like a water hose nozzle—the more constriction, the smaller the pattern.

At first glance it does seem reasonable that the ideal small game boring would be full choke. This would allow the hunter to reach out. There may be

some merit to that thinking for open country pheasants and waterfowl hunters, but a tight choke is a disadvantage for grouse, woodcock, quail and rabbit shooting. Shots at these targets seldom reach 35 yards, and in most cases are well under 30 yards. Improved cylinder or modified at the most would be a wiser selection.

After 50 seasons of small game shooting, I think the ideal setup for rabbits, grouse and even pheasants would be a two-barrel outfit carrying improved cylinder and full borings. For over 20 years now I have stuck with IC and modified for all my small game shooting. I know that many of my earlier misses in the field were due to being overchoked.

The only way to establish a true picture of a shotgun's choke is to pattern it on paper. What is stamped on the barrel may not prove to be the case on the patterning board. First, the form of constriction and the way it is installed varies considerably with each manufacturer. On top of this, pattern control is affected by the size of the shot pellet, the shot charge weight and its velocity, along with other variables. There is no set standards of choke measurement among shotgun manufactur-



ers. Actually, that's probably just as well, as no two shotgun barrels of the same choking deliver identical patterns with the same brand and type of shotshell. It all comes down to finding out how your individual shotgun forms its pattern.

Patterning is not a fifteen-minute, five-shot affair. Still, it's important to know how your shotgun patterns and where it places the pattern. This requires shooting a lot of ammo and keeping precise measurements and pellet counts.

The standard practice for patterning a shotgun is firing over a 40-yard range and counting the number of pellets that fall into a 30-inch circle placed over the densest part of the shot concentration. An improved cylinder boring will put 45-50 percent of the shot into the circle, modified, 55 percent or so, improved modified, the tighter version of modified, 55/65 percent, and full choke 70 percent or more.

I'm not convinced the average small game hunter like myself needs to know or should be concerned with 40-yard patterns. My own hunting experiences and data from other small game hunters show that most rabbits, woodcock and grouse are killed at less than 30 yards, and a high percentage of these well below 25 yards. My longest

rabbit shot over a four-year span was roughly 32 yards, with the majority between 20 and 25 yards. If these distances hold generally true throughout the small game shooting fraternity, and I feel they do, why in the world are so many small game shooters placing a millstone around their necks by going all out for tight chokes? It boggles my mind.

My shotgun patterning range is 35 yards long, but I have a portable target frame for tests at other distances. I'm not interested in what a shotgun will do at extreme ranges; I want to know its patterning potential for the usual distances I shoot in the field.

I earlier mentioned some of the problems resulting from a long shotstring at the greater ranges. However, at normal field shooting distance, the length of the shotstring is unimportant. The small game hunter should be more concerned with using a shotgun and load that gives a wide even pattern at 30 yards. Don't be overly concerned about the pellets on the extreme edges of the pattern here; at close ranges, even the fliers have plenty of speed and punch.

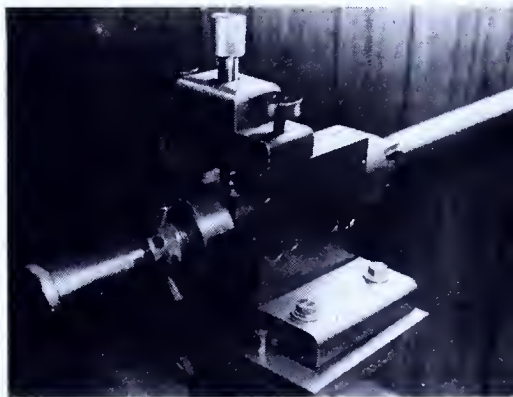
Success in small game shooting comes from having a shotgun with the correct stock length and comb height, along with knowing how it patterns with the loads you use.

---

## ***GUNnews for Shooters...***

Determining chamber pressures is extremely difficult for handloaders. Most just slowly increase loads until signs of high pressure appear, then back off. Now it is possible to measure pressure as the ammunition factories do—with a universal receiver and pressure barrels. Oriented more toward club than individual use, this receiver is made of heat treated alloy steel and comes complete with mounting base, trigger assembly, barrel mounting collar, top block and yoke. Barrels available in all calibers, with pressure pistons for precise CUP or LUP measurements. (Ballistic Research Labs, D&H Precision Tooling, 7522 Barnard Mill Rd., Ringwood, IL 60072.)

OCTOBER, 1985



# *In the wind*

bob mitchell



Of the 215 million acres of wetlands in America at the time of colonial settlement, less than half remain. In a recent U.S. Fish and Wildlife publication, "Wetlands of the United States: Current Status and Recent Trends," it's reported that 87 percent of this loss was caused by agricultural development, 8 percent by urban development. Wetlands are vitally important, not only because they are the most productive habitat for wildlife, but also because they purify water and control flooding. Philadelphia's Tinicum Marsh, for example, a 512-acre freshwater tidal wetland, receives and purifies discharges from three city sewage treatment plants.

Six young peregrine falcons were raised and released from atop a building in downtown Albany, New York, this past summer. Because peregrines have been nesting successfully in New York, Baltimore, Montreal and Los Angeles, among other cities, for the past few years, officials are optimistic that the endangered peregrine will soon become established in the Empire State's capital. Another 10 peregrines were released in the Adirondacks, bring the total number released in the state to 121. In addition, four pairs of peregrines, two in New York City and two in the Adirondacks, produced nine young this year.

The Virginia Institute of Marine Science is using space age technology to learn more about the movements of Atlantic sea turtles. Satellites are going to be used to track the movements of radio-equipped loggerhead and the nearly extinct Atlantic Ridley turtles.

For the second consecutive year, about 900 pairs of Arctic, common and roseate terns nested on the Petit Manan National Wildlife Refuge, making it one of the three largest tern colonies in Maine. The state's tern populations have declined 40 percent over the past decade, primarily because herring and black-backed gulls are taking over nest sites and preying on tern eggs and chicks. On this particular refuge, terns were totally absent six years ago. But following the use of an avian toxicant to rid the islands of nesting gulls in 1984, not only did the terns return, but so did many other imperiled seabirds.

**It's been reported that deer hunters in Ontario boost the province's economy by nearly \$25 million a year. Equipment expenditures account for \$6.8 million; food and beverages, \$6.6 million; travel, \$5.2 million; accommodations, \$3.2 million, and miscellaneous expenditures, \$2.4 million. In relation to the most recent deer harvest total available, 19,012, this translates into a cost per deer figure of over \$12,000.**

The Arkansas Forestry Association recently asked all commercial and non-industrial landowners owning at least 1000 acres of forests in the state what their public-use policies are. Over 85 percent of the corporate lands and 77 percent of the individually owned lands were opened for unrestricted public use. Less than one percent were totally closed. Hunting was the most popular activity pursued on these lands. The complaint most commonly reported by the landowners was trash dumping, followed by illegal firewood cutting and road damage.

In 1980, nobody was sure black-footed ferrets were not extinct. None had been seen anywhere in over a year. But in 1981, three were found in Wyoming, and last year 130 were censused there. Spurred by these developments, the Wyoming Game and Fish Department and the U.S. Fish and Wildlife Service hope to capture several ferrets in each of the next few years to use as captive breeding stock. The progeny, it is planned, will then be released in Utah, Montana, Colorado and possibly other states in an effort to expand this rare animal's range.





### **Voluntary Waterfowl Stamp No. 3**

Pennsylvania's 1985 waterfowl management stamp, created by Ned Smith, is the third such stamp offered by the Game Commission to provide waterfowl enthusiasts and stamp collectors an opportunity to help protect and manage waterfowl in the state. Funds derived from these sales are used for waterfowl habitat acquisition and development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Available at the Game Commission's Harrisburg office, regional offices, the Pymatuning and Middle Creek Wildlife Management Areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints are available from art dealers and galleries nationwide. Collectors note: The agency's first stamp, issued in 1983, featuring a pair of wood ducks, will be available only until December 31, 1985, at which time remaining supplies will be destroyed.



*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in **GAME NEWS**. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



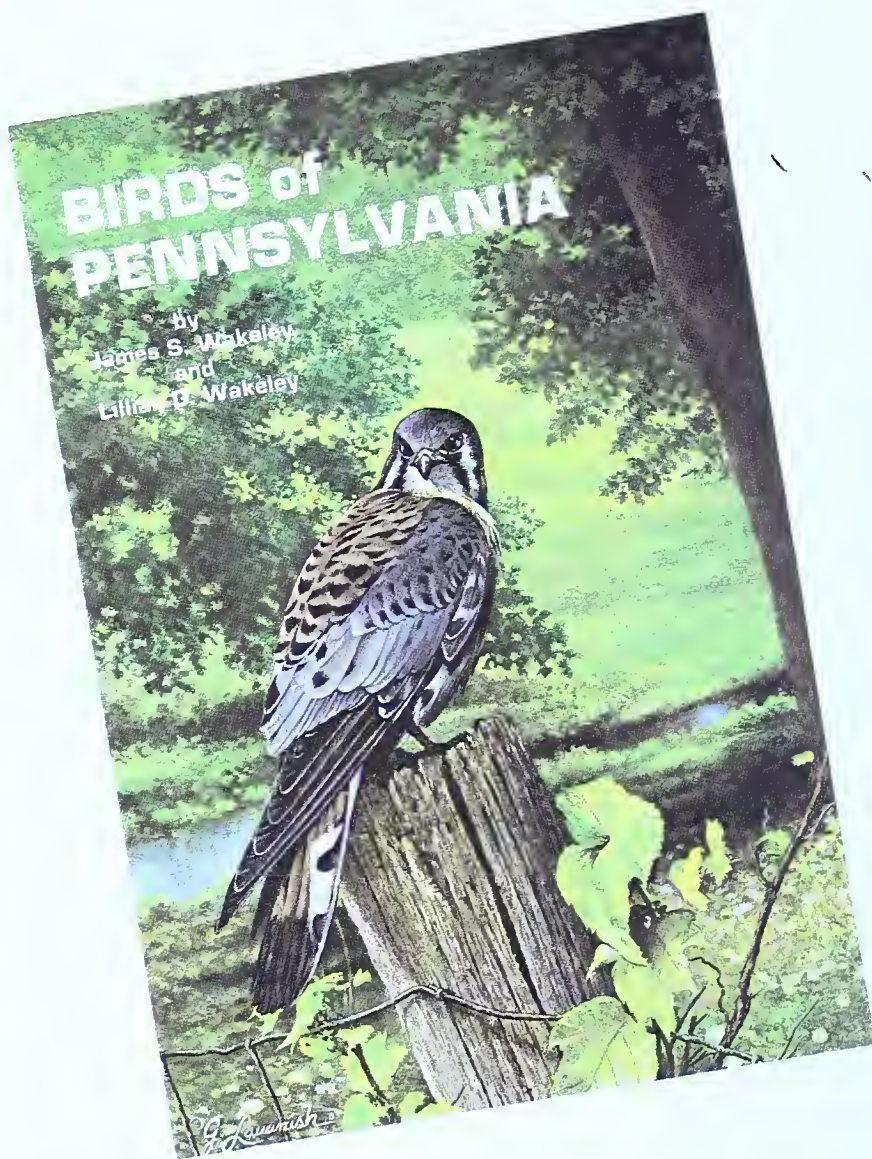
# PENNSYLVANIA GAME NEWS

NOVEMBER 1946

60 CENTS







*Birds of Pennsylvania: Natural History and Conservation*, a completely new book by Jim and Lillian Wakeley, includes the most up-to-date information on bird biology and behavior, and the kinds of birds commonly found in the state, arranged according to the type of habitat where they are most likely to be seen. This 214-page hardcover book, supplemented with 40 full-color pages featuring the Game Commission's popular bird charts and previous GAME NEWS covers, is being sold for \$10, delivered.

Make check or money order  
payable to:

PENNSYLVANIA  
GAME COMMISSION  
P.O. Box 1567  
Harrisburg, PA 17105-1567



**Richard L. Thornburgh**  
Governor

**COMMISSION MEMBERS**

**Thomas P. Greenlee**, President  
Tionesta  
**Taylor A. Doeblar, Jr.**, Vice-President  
Jersey Shore  
**C. Dana Chalfant**, Secretary  
Gibsonia  
**Elmer M. Rinehart**  
Stroudsburg  
**Paul E. Hickes, Jr.**  
Alexandria  
**Donald R. Craul**  
Lewisburg & Wellsboro  
**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director  
**Harvey A. Roberts**  
Deputy Executive Director  
**Ross E. Starnes**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration  
**Dale E. Sheffer**  
Game Management  
**Lantz A. Hoffman**  
Information & Education  
**Jacob I. Sitlinger**  
Land Management  
**Gerald D. Kirkpatrick**  
Law Enforcement  
**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor  
**Robert C. Mitchell**  
Assistant Editor  
**Betsy Maugans**  
Editorial Assistant  
**Libby Williams**  
Circulation

**FEATURES**

<b>Greene County Grouse Hunt</b> . . . . .	3
By Andy Lucas	
<b>Pheasant Hunts Remembered</b> . . . . .	6
By Nick Sisley	
<b>"You Done All Right Boy — "</b> . . . . .	12
By Paul A. Matthews	
<b>Last Season's Discovery</b> . . . . .	16
By J. James Faux	
<b>A Taxing Solution</b> . . . . .	21
By Bob Mitchell	
<b>Black Bear With A Muzzleloader</b> . . . . .	25
By Denny Yale	
<b>My Cabbage Patch Buck</b> . . . . .	29
By Denny Kolakowski	
<b>A Tree Farm Legacy</b> . . . . .	41
By Ken Olenderski	

**NEWS**

<b>Field Notes</b> . . . . .	33
<b>Conservation News</b> . . . . .	38
By Ted Godshall	
<b>In the Wind</b> . . . . .	64
By Bob Mitchell	

**COLUMNS**

<b>Another View</b> . . . . .	43
By Linda Steiner	
<b>Outdoor Wildlife Learning</b> . . . . .	45
By Bill Einsig	
<b>GAMEcooking Tips</b> . . . . .	47
By Carol Vancy Wary	
<b>DGP Diary</b> . . . . .	48
By Joe Carlos	
<b>Thornapples</b> . . . . .	51
By Chuck Fergus	
<b>Bow Hunting Coverup (Archery)</b> . . . . .	55
By Keith C. Schuyler	
<b>The Venerable 270 Winchester (Guns)</b> . . .	58
By Don Lewis	
<b>Young Artists Page</b> . . . . .	63

**COVER PAINTING BY BOB SOPCHICK**  
(Cover Story on page 11)

## What's To Lose?

**T**RADITION. What we do is probably determined more by tradition than we realize or like to admit. By doing things repeatedly, we do them better and more efficiently. On the other hand, by doing the same thing over and over in the same manner, by not being willing to experiment or try something new, it's possible to miss out on a new discovery.

Traditions run especially deep among deer hunters. It's traditional in the sense that our ancestors back further than most of us can trace were hunters, and it's traditional in the sense that many of us refuse to consider being anywhere else but on our favorite deer stand on the Monday following Thanksgiving.

There's undoubtedly a lot to be said for such steadfastness, but it can have drawbacks. Thousands have trekked to the same tree, same hollow or same ridgetop for many years in search of a whitetail. That's okay, unless the return trip is regularly made in disappointment. Then it's time to break tradition. It's time for a change.

Deer hunting opportunities change constantly. Hunters who are more interested in venison than in starting the opening day watching the sun rise over the same mountaintop should change too.

Every year brings complaints of no deer from disgruntled hunters. Every year also brings report cards from many thousands of hunters who do find deer. Over the past ten years, reported harvests have averaged 134,104; they ranged from 114,794 to 148,530. More deer have been taken in Pennsylvania over the past ten years than in any other decade in our history. These high sustained yields attest to remarkable deer management success. The problem lies in the fact that in some places — traditional places — deer are not as abundant as in past years. The solution lies in finding those areas where deer are becoming more abundant.

Where are these places? Generally speaking, deer are not as numerous on mountainous public land across northern Pennsylvania — the traditional deer hunting areas. They are becoming more abundant in agricultural and urban areas, particularly in the southern half of the state.

Excellent deer hunting still exists in northern Pennsylvania, though. On page 39 of this issue is an offer from Allegheny National Forest officials to help antlerless deer hunters find productive places to hunt. Several forestry companies make similar offers.

Traditions are hard to break. And when it comes to deer hunting, opening day is not the time to start looking for a new place to go. But this is November, and although antlerless deer hunters have already decided in which counties they will hunt, there is still time to explore new hunting territories. Rubs, scrapes and trails are evident at this time, and squirrels, grouse and turkeys are ample reasons in themselves to be afield in deer country.

Look around this month. Consider different areas and hunting strategies. Be receptive to change. You might find an ideal spot — and the beginning of a new tradition. If not, at the very least you'll have renewed confidence in that same tree, hollow or ridgetop, and that will make your opening day sunrise all the more exciting. Good hunting. — *Bob Mitchell.*



# Greene County Grouse Hunt

By Andy Lucas

**M**Y ALARM went off promptly at 6 a.m. Saturday morning, or so I assume. I really couldn't say because I was rudely awakened at 7 a.m. by the simultaneous blasting of a horn and an eruption of profanity outside my apartment window.

Realizing what time it was, I leaped from bed and began to dress. If the next five minutes of my life could have been captured on film, they would have revealed to the world just what the human body is capable of. From my initial leap out of bed directly into frayed canvas hunting pants and boots, the socks to which had been previously placed in the right hand pocket of my hunting jacket for application on the way to the farm we would hunt, to the final stumbling, bootstring tripping, shotgun shell dropping dash to my friend Gregg's truck, I was a prime example of *Grouserus Hunterus Clutzerus*.

## Restrained Hysteria

Now, Gregg, being the good friend that he is, restrained himself from total hysterics at my appearance and even controlled himself when I asked why he was late. But a bit of emotion did show in his eyes when he calmly asked if I was going to bring my shotgun or just gas the birds with my morning breath.

Thus began one of our typical-Saturday-morning-after-a-hard-Friday-night grouse hunts.

The drive to Greene County was uneventful and lasted just long enough for me to finish getting dressed and work up a good rub of snuff.

On arriving at my friend Ron's farm, Gregg and I realized that he, Ron, had not yet arrived, so we tried to spot some groundhogs. However, the morning was too cool and the bags under my eyes had just begun to subside enough for me to make out Gregg's image, let

alone some groundhog 500 yards away.

Then suddenly, and without warning, we heard it. It was faint and in the distance but it was unquestionably the sound of Ron's truck. Now, in order for you to realize why it is so easy to recognize the sound of Ron's truck, even after hearing it only once, I must analogize. Or maybe metaphorize. If you can conjure up in your mind and eardrums the combined sounds of 747 jet engines, Sherman tanks, and Ethel Merman singing 'God Bless America' in a tin room, you'll get some idea as to the intensity of this vehicle. In addition to all this, echoing throughout the hills and valleys of Greene County, was the voice of his majesty, Bismark.

Bismark is, in accordance with his name, just about the biggest St. Bernard there ever was. He was standing in the back of Ron's pickup, jowls flapping in the wind, letting the sheep, cattle, deer, and all the other living critters know that he had indeed arrived.

With Ron's arrival, Gregg and I went inside to wait for our other two friends, Ken and Frank. Up to this point our grouse hunt had progressed at about a normal pace. We had planned on being in the woods at 8 o'clock. It was now 8:40 and the others hadn't arrived yet. But just as Ron, Gregg and I were embarking on an in-depth discussion of Ken's family back-





**IT IS AMAZING, but no matter how tired you are or how long you've been walking, when you get a grouse your body finds new energy and stamina and you feel like you can hunt forever.**

ground and the evolution thereof, he and Frank pulled up. We then loaded into Ken's truck and were off.

The first fifteen minutes of any grouse hunt are always the most exciting to me. My heart pounds with anticipation; my reflexes are keyed and sharp; my eyes constantly check on the working dogs, and my ears are ever in readiness for the muffled explosion of a flushing grouse.

We had walked for about ten minutes, spread out in a line, when it happened. I didn't hear the flush but I did hear the *boom-boom-boom* of shotguns. I looked up in time to see the shrinking image of a grouse on the tree line. Then came the familiar rationalizations: "Flushed right between my boots!", "That darn bird was flying

right at my face!", "Just when I shot he made a 90-degree turn!", "That big tree jumped right up in front of me as I shot!" And so on.

We couldn't have gone more than 75 yards when a bird exploded between Ron and me. In an instant I raised my gun, flicked off the safety, and emptied both barrels. As I lowered my gun I searched my mind for an excuse I hadn't used yet this year. I couldn't think of any so maintained a dignified silence. We continued to push on through the heavy woods, working every thicket and averaging a flush about every fifteen minutes.

### Slow Motion Nose-Pounder

An hour later I experienced something that every grouse hunter in Pennsylvania must go through at least once: a slow motion nose-pounder. It can happen at any time but generally comes after you've been walking hard for about two hours and your legs are getting a little heavy. A faint hint of muscle cramps emanates from your thighs and the soles of your feet begin to rise in temperature.

I was halfway through a thicket and lunging through some grapevines when the earth dropped out from under me. Now, this was not one of the normal rug-pulling slides that happens about every two dozen steps on a Greene County grouse hunt. This was a *happening*. I can remember it all very distinctly—the earth dropping away and my gun flying into space; the tangling of the vines around my feet and the branches slapping me in the face as my nose rapidly approached a nearby log; the multiple explosions of grouse flushing, one on my left, one on my right, and one in front of my face; the simultaneous shotgun blasts and the shouts of successful hunters. Then, in a flash, reality struck back. As adeptly as possible I righted myself and, realizing that everyone was looking at me, casually asked if anyone had seen the rabbit I dove for.

It was no use. It was too obvious. Everyone knew I had just been through



a slow motion nose-pounder. So while I used a poplar branch and handkerchief to rid my barrels of two pounds of mud and leaves, my friends fanned out to continue the drive.

After another hour of slogging, all on the side of a hill, Ron decided we should start to hunt back. However, he wanted to put one man on top of the hill, two on the east side and two on the west side then walk south. Since Frank and I were at the bottom of the hill and the top of the hill was about a hundred miles away, we expressed our displeasure with this idea. But we were quickly overruled, so we started our trek to the top.

This was the point when I started to feel GHD setting in. GHD is short for grouse hunter's delirium, and when it sets in a man changes drastically. It comes from walking on one side of a hill for so long that your hipbones cant to a 45-degree angle and your uphill leg shrinks ten inches shorter than your downhill leg. Your ankle joints bend over and the bottoms of your feet wrap up into rolls along the edges of your shoes. Your steps become twelve-inch slides and the smallest twig is a major obstacle. At this point a grouse always flushes in the open about 15 yards in front of you, flying in an easy right-to-left route about 10 feet off the ground, and all you can do is cry. However, a short rest took the edge off the GHD's and we were able to continue our trek out of the woods. By this time everyone

had shot a bird except Frank and me. We'd each had a flush in our general direction, but the birds quickly turned into someone else's territory.

Nearing the final quarter-mile of the hunt, I was debating what excuse to give for coming home empty-handed again when a bird flushed behind Frank and flew directly away from us. As I reacted to the thunder, I saw the grouse about 20 yards in front of me and fired. The bird was headed over the top of a rise, and when I shot it, it disappeared. The general consensus was that I had missed, but I never take a chance on letting a wounded animal suffer, so I went to look. As I approached the area where the bird had disappeared, about 30 yards to the right it tried to take off, then ran. I could see it had a broken wing so another quick shot from my gun netted me my prize for the day.

It is amazing, but no matter how tired you are or how long you've been walking, when you get a grouse your body finds new energy and stamina and you feel like you can hunt forever.

We continued walking, and Ron got another bird just as we came into sight of the truck. That made five birds—not bad for three hours of hunting. It also made five tired men who headed back for some lunch before the afternoon hunt. But even as we drove away, I swear I heard a flush and in my mind's eye saw the shrinking image of a grouse on the tree line.

---

## Deer Don't Have To Be Displayed

Deer do not have to be, and should not be, displayed on vehicles while being transported in Pennsylvania. It is required only that they be properly tagged. Actually, the table quality of venison suffers when it is exposed to elements such as snow, wind, road dust, grime, fumes and engine heat.

## Venison Can Spoil Quickly

Hunters should take proper care of their deer and have them processed as quickly as possible to prevent spoilage during warm weather. Skinning helps reduce chances of spoilage.

Some thought should be given to the spot where the animal is hung. In recent years, deer hanging from camp poles have been stolen, and, in some cases, eaten by hungry bears.





# Pheasant Hunts Remembered

By Nick Sisley

**S**UDDENLY my tired legs were forgotten. If a doctor had listened to my heart with a stethoscope he'd have thought it was going to blow up. My eyes must have been the size of Coke bottle bottoms. A pheasant Uncle Jim had just flushed was flying right in front of me. It was like one of those dreams when you want to get something accomplished but can't. I was frantically trying to thumb back the hammer on my secondhand five-dollar single barrel 12-gauge, but I couldn't get it to budge.

It seemed to take that bird forever to cross in front of me, wings flapping defiantly. The morning sun glittered off the iridescent feathers, making the red cheek patch glow and that white collar stand out like a sore thumb. And those long, long tailfeathers!

There was no chance I'd get the hammer back and touch off a shot in the excitement of such a moment. There still wouldn't be much chance if I used that type of smoothbore today. Ever since I've cursed stiff hammers on cheap single barrel shotguns.

About the time my heart reached machine gun rate, Kenny, a cousin ten years my senior, slapped his Browning humpback to his shoulder and sent that ringneck for a somersault. His Brittany was already making the retrieve by the time I closed my gaping mouth. How I yearned for a Browning humpback right then—a shotgun on which you only had to push off the safety, swing and pull the trigger. And I yearned for a bird dog of my own, too.

If memory serves me right, that year was 1949. The place was Westmoreland County, somewhere between Donegal and Champion. It was rolling farmland then, dairy cattle country

rich in hay fields, corn, oats, wheat and the like. Now the area has been “rescued” by land developers. Populations of pheasants and other small game have dwindled. I was 12 years old. It was my first year of hunting. My Dad wasn't a hunter, but luckily Uncle Jim took me under his wing on occasion. At that time my chances of acquiring a bird dog or a “real” shotgun were about the same as they are of me acquiring a degree in nuclear physics today!

Despite going hunting another time or two that first season, I didn't kill one piece of game. To an overanxious 12-year-old, a total lack of success is serious business. Trouble was, I could never shoot at anything. My thumb wasn't strong enough to pull back that hammer when there wasn't any game around, let alone when I tried to do it under duress—as when three hens and a big cockbird got up from under one of the Brittany's points. Maybe Uncle Jim saw to it, for safety reasons, that all I had to hunt with that first year was the cumbersome 12-bore single with the impossible hammer.

## First Shotgun

It was ten more years before I acquired my first “real” shotgun. I was visiting Duke, a close friend of Frank, my father-in-law. Duke knew I was a gun lover, and that I couldn't wait for opening day of small game season. Duke, Frank and I went back to his study to open his gun cabinet and bring out the contents, one at a time. I

eyeballed and shouldered every one. There must have been ten or so. When it came time to lock them up, Duke kept one out. He insisted I take it home with me. I balked for many minutes, but Duke insisted, and so did my father-in-law. Eventually, I could see that giving me one of his shotguns gave Duke a great deal of pleasure. In the years since, I've always said I was going to do something similar for an eager, aspiring hunter some day, and I still intend to do that when the occasion is just right.

The shotgun Duke gave me was a Plain Jane, a 16-gauge, no-rib Ithaca Model 37 pump. Finally, I had my first real shotgun! The next day I bought a hand trap and several boxes of shells. Friends threw clay targets for me, but I didn't break any records. A few weeks later I was in the south-

**TOM FEGELY** has done a lot of hunting in a lot of places, but he still finds there's something special about long-tailed ring-necks on a crisp November day.



east corner of Westmoreland County again, tramping covers that Uncle Jim had introduced me to a decade earlier. The Ithaca came through that day, but not immediately. It was one of those days when hens keep confusing the situation. My partner and I must have flushed 25 of them before a cockbird peaked into our picture. I promptly ventilated the air all around that one three times.

### Huge Pheasant

I remarked what a huge pheasant that one appeared to be, so we watched carefully where he put down, about a quarter-mile away. Without a dog we wouldn't have had a prayer of getting that wily veteran airborne again, but I've always said I'd rather be lucky than good.

No damage was done, however. When we flushed that clever customer out of a dense blackberry patch, I kept shooting at tailfeathers. Not until a few years later did I find it a great deal more productive to concentrate on a rooster's red cheek patch or that ring around his collar instead.

By mid-afternoon we were both getting tired. The spark that our peanut butter and jelly sandwiches had provided at noon was gone. We were working back and forth, trying to cover every nook and cranny in a grown up weedfield, when the third rooster of the day became my charm. I can still see that bird going up between us, then slanting my way with a tilt of his wings and tail gear. The Model 37's muzzle swung ahead of the whole bird this time, and I slapped the trigger automatically. Somehow the timing and muscle coordination were perfect—like Magic Johnson racing the length of the court and concluding the blitz with an awesome slam dunk!

I sprinted to the spot where the gaudy bird had gone down, afraid he might get away. That magnificent creature was motionless, however. I took a minute to marvel at the bird's beauty. He was a prize even as he lay there—dead but still somehow living.



By the time the next pheasant season rolled around I'd bobbed the Ithaca's 28-inch modified barrel and added a Poly Choke. Overall barrel length was now 25 inches. It was a honey of a shotgun. I wish I still had it. Over the years I've spent a great deal of time, effort and money on becoming more adept with a shotgun, and I'm betting I wouldn't be ashamed of any showing I might make with that particular Ithaca today.

Then there was the time Arch Hulings and I were hunting woodcock in Armstrong County. The season had opened two weeks previously, but the weather had been mild and the little russet longbills hadn't started for Dixie yet. That day also marked the opening of pheasant season. Now Arch and I were bulling our way through the most twisted cover you ever saw — briars, alders, willows and worse. The top of the overstory might have been fifteen feet high. No pheasant in his right mind, unless maybe he was trying to save his hide, would seek out such a place.

Off to my left, Arch was trying to protect the stock on his new Browning 12-gauge Superposed. I was just trying to get to the other side of the entangling patch. I don't remember which gun I was carrying that day. Anyway, there was a great commotion off to Arch's left. From the loud raspy cackles, it was easy to surmise that a long-billed timberdoodle taking off this was not.

### Masochist

This bird was a masochist. His wings beat unmercifully against the vegetation as he fought upward. A songbird couldn't have found an opening out of that patch, let alone a 2½-pound bird with all manner of excess posterior plumage. Somehow, however, this bird was accomplishing the impossible. But so was Arch. No matter about seratches on an expensive Browning stock, he meant to put some lead into that rooster!

He bowled that ringneck magnifi-

cantly, despite the range being no more than 10 yards. Luckily, he hit the bird a raking shot with the pattern fringe and didn't destroy it completely. So I learned that ringnecks might typically be taken in open settings, but not always.

Eventually, I wound up with several good shotguns, and over the years I've had my share of excellent pointing dogs. The springer spaniels and the labs, however, have always tended to handle ringnecks better than pointing types. Back in the mid-1960s I became interested in dog training. Come early August, when the state's dog training season opened, I'd always spend a long weekend or two around Hershey. There are still a fair number of birds in that section of the state, but young hunters just can't believe how many pheasants crowded the fields sur-

**SISLEY SAYS** Labs and springers tend to make the best pheasant dogs, but he has enjoyed many memorable days with pointers, too. In the end, it comes down to the individual dog and its training.



rounding Hershey two decades ago.

In two days of dog training it was common to put 300 birds in the air. And what great training the young pheasants offered then. Only half-grown in early August, they were strong flushers, they hadn't yet acquired their running habits, and when



**A BRACE OF cockbirds can make any upland hunter's day. There's something about the pheasant—its size, its spectacular colors, its brashness—that sets it apart from other gamebirds.**

they flew it was for relatively short distances, sometimes as little as 50 yards. Concentrating on one or two puppies during a two-day weekend, I could always make genuine progress because of the multiple encounters between dogs and young pheasants.

Those tight sitters allowed a pup's pointing instincts to forge to the front, a check cord prevented him from chasing, and sometimes he was even steady to wing and shot (training pistol) by

the time we left. And being able to work scattered singles, after a flock of young pheasants flushed, was certainly icing on a great training cake.

For several summers in the early 1970s I enjoyed similar early August memories, training on young pheasants at a nearby county park. The managers mowed only narrow strips in vast weedfields. Maybe every four years all the weeds would get cut, using this narrow strip cutting technique. I made quite a few bird dogs in those weedfields, working them on the wild young pheasants that abounded there. However, more and more recreational use was demanded of the county park acres, until, eventually, the several hundred acres there are mowed as close as a lawn, repeatedly over the course of each summer. Pheasants can't exist in such a desert, so that was the end of dog training there.

I well remember a day that resulted in a story for the November 1970 GAME NEWS, "The Dynamic Duo." Batman and Robin were riding atop the TV ratings then. I had luckily killed a brace of ruffed grouse by early afternoon, and, not wanting to head home at that hour, decided to finish out the day on pheasants. I'd flushed ringnecks in a nearby cover before. It took plenty of tramping there before I saw my English setter egg-walking behind a runner. I ran around a stand of aspen, hoping to cut the bird off before it emerged from the opposite side. Unfortunately, that rooster rocketed out before I could get in position. All I could do was watch him fly off, but that I did.

Concentrating on where he was going to land, I hadn't been paying attention to my dogs. Obviously, they were hard at work, for the loud cackling of two roosters getting airborne brought me back to the situation at hand. I managed to hit one with a desperation shot, but I didn't kill him outright. Searching the area, the dogs pushed him out again—a slow, burdensome flush. This time I centered him.



I headed for the spot where I'd seen the first bird land, encouraging the dogs to the right place. I circled the area in hopes of keeping the rooster from running off, clucking encouragingly to the dogs. Shortly, the pup made a beautiful point. The setter backed without encouragement from me. The rooster flushed with a tree between us, but a second later he was off to one side, offering an easy straight-away. The dynamic duo was mine—a limit of ruffed grouse and a limit of pheasants—all in one day.

### A Rooster or Two

Though I've always loved pheasant hunting, I've become a grouse and woodcock addict over the years. Every season, however, I've jumped a rooster or two—or three—while pursuing grouse. Until 1984, I had killed at least one ringneck each season while ruff hunting. Last fall was the first in which I didn't bag—or hear or see—a pheasant on one of my woodland tramps for grouse.

Pheasants encountered while grouse hunting have been the source of many fine memories. One that comes immediately to mind took place on the flood plain of a reservoir. A great mixture of hawthorn, crab apple, alders, sumac, gray and silky dogwood and briar covered the area. I had been mumbling to myself because the dog was pointing and feathering ahead slowly. This went on for maybe 150 yards. I should have guessed it was a running rooster, not a grouse, though these days ruffs

**GROUSE AND WOODCOCK: AN UPLAND HUNTER'S BOOK**, by Nick Sisley, author of the foregoing article, covers two of the nation's most challenging game birds—from stem to stern. There's hunting how-to, technique, dog training tips, how to shoot better, and more, all written in Sisley's inimitable style and showing his thorough knowledge of the subject. Order from Impact, Alder Acres, 509 1st St., Apollo, PA 15613. \$14.17 delivered. Make checks out to Impact.

are gaining quite a reputation as runners, too.

Finally Magic locked into a picture point. Her rock-steady pose indicated the bird was only a few feet ahead of her quivering nostrils. I hurried in, expecting a short-winged brown buzzbomb, but was rewarded by a fire-engine-red cackler taking off.

Once more I saw that red cheek patch, the white collar ring, and those long, long tailfeathers. For an instant I was back in the autumn of 1949, a single barrel 12 in my hands. The vision lasted only an instant, then I was swinging the autoloader. Even as the buttplate hit my shoulder, the barrel was flashing past that iridescent head.

I hit the trigger. The ringneck's wingbeat froze in mid-air. He was perfectly centered at about 20 yards.

Magic held steady to my quiet "Whoa" and I walked ahead to claim my prize. Even motionless in the cover on his side, that bird radiated color and life. He still does. I have him mounted right above my desk.

### Cover Story

There's undoubtedly a lot of luck involved in bagging a bear; 99,999 other hunters are out there for the same purpose, and there's only two days in which to accomplish it. But record harvests have been attained in recent years, so success can be had. To increase your odds, stay alert. Bears are crafty. It's extremely unlikely you'll walk up on one without it hearing and smelling you coming. And when it does, it'll figure out what to do so you'll never set your eyes, let alone your sights, on it. Luck plays a big part, but don't count on it.





BOB  
SOPCHICK



# “You Done All Right, Boy—”

By Paul A. Matthews

TO A KID of ten or twelve, old man Chapman was about as cantankerous as a Methuselah porcupine. He sat straight across the table from me, his jaws working furiously on a leg of fried squirrel and his eyebrows humped into a scowl that drove a spike of apprehension deep into my young soul. “Anything I hate,” he growled, “is to bite into a hunk of fried squirrel an’ spit out a piece of chilled shot ’er splinter of bone. If you don’t know how to shoot squirrels”—and he jabbed a bare leg bone at me—“then either learn how or don’t hunt ’em!” And then he lowered his head and I heard what could only be a No. 6 pellet rattle onto his plate.

Now in those days—fifty years ago or better—you paid attention to your elders. They helped steer you through the early years, molding and shaping and whittling until, when it was time to leave the nest, you did so with a certain degree of respect to yourself and others. So after a brief period of silence slipped by during which I swallowed a lot of pride, I finally got up the courage to ask him, “How are you supposed to shoot squirrels, Mr. Chapman?”

His face softened—a hint of a smile under that old walrus mustache. “With a rifle, boy. Through the head. There ain’t no other sportin’ way.”

That happened so many years ago that today the memory of old man Chapman isn’t much more than a hazy image in a foggy mist. I remember his mustache and the lopsided look on his face because some horse had bit his right ear off almost flush with the side of his head. And I remember that his eyes had a way of augering right through you. But beyond that, old man Chapman is just a name on a signpost that indicates a specific time and place along life’s pathway.

But on that long ago evening, he had stung my pride—and after I’d seen to it that Ma invited him over for a Friday night supper. So without making any more fuss that might aggravate an already bad situation, I nodded in agreement and silently promised myself that I’d show the old coot a thing or two on the following day.

Have you ever been out squirrel hunting on a November morning when the air is chilled with a light mist that’s rising through a blaze of sunlight? Have you ever walked along a creek on such a morning, the sun warming your back and the smell of crisp leaves and the woods somehow mingling with the tinkle of the creek over the stones and the cawing of crows, everything mixed together to fill your soul with a feeling you can’t get anywhere else?

That’s the way it was the next day when I took my 22 and went up along Mallory Run with visions of head-shot squirrels in my mind. There were millions of them along the creek, and when I got to my favorite spot—a hillside of oak and beech and hemlock—I sat down in the warmth of the sun with my back to a tree and waited.

## With a Rifle . . .

Maybe ten minutes went by before I heard the unmistakable rattle of leaves downhill from me, and a few seconds later saw the bushytailed critter working his way uphill, darting and poking and jumping as though he never could make up his mind what he wanted to do. With a shotgun, he’d have been in the pot. With a rifle. . . .

To this day I can remember bringing the little rifle to my shoulder and squinting along the barrel, trying to align the sights on the squirrels head. Just as soon as the sights got in the

proximity of the target, the target jerked in another direction. As the squirrel worked his way up the hill toward me, my heart started hammering and my hands started shaking so much that when he finally stopped and stood up on a stump and looked at me from twenty feet away, I yanked the trigger in desperation. He was gone long before the empty cartridge case hit the ground.

Fifteen minutes later I repeated the process, and twenty minutes after that I did it again. Sometime during the day I managed to get a single squirrel shot through the ribs because I couldn't stand the waiting process any longer. And that afternoon when the sun was still quarter high above the western mountain, I slunk home, avoiding the dirt road that would take me past old man Chapman's place. If there was anybody I didn't want to see, it was him.

"Lo, boy."

I jumped about ten feet. With my mind in the pits of dejection, I had almost walked past him sitting there

**I DIDN'T HAVE** time to get the shakes. I already had the rifle in hand, and as soon as I saw the squirrel's head, I eased the gun into position and was squeezing the trigger when the sights settled on their mark.

along the edge of the woods with his back to an oak, his battered old rifle upright between his knees and a pair of squirrels on the ground beside him—their heads gone and not another mark on their body.

"Looks like you got one," he said.

"Just one." I tried to turn it so that he wouldn't see where it had been hit.

"Fine, fine," he said. "A man's always got to start with the first one." He arched an eyebrow and then held out his hand. "Can I see your rifle?"

### Took a Shot

He turned the little rifle over in his hands a dozen times, squinted along the barrel and nodded his approval at what he saw. And finally, with his back to the tree and his elbows propped against his knees, he took a shot at a walnut that he'd stuck on a bare spot 30 yards away.

"Your rifle's shootin' low an' to the left."

"Maybe that's why I missed. . . ."

"Probably," he said. And using a piece of dead oak for a drift and a stone for a hammer, he drove the rear sight to the right and raised it a notch. "Now you try it."

It may have been an accident, but the walnut shattered and old man Chapman laid his bony hand on my shoulder. "You done all right, boy. A good shot."

I grew about ten feet tall right then and there.

The next Monday was Armistice Day, another fall day forever etched in my memory. And thirty minutes after I had wolfed down half a dozen sourdough buckwheat pancakes, a pair of pullet eggs and some fried potatoes, all washed down with scalding coffee, I was working my way along the wooded ridge that bordered Mallory Run.

The first squirrel was a single that I spotted working in the leaves far below me. He was digging furiously, poking in the dead-leaf carpet for beechnuts. Trying to keep a tree between him and me, I worked down the hill, taking a





step every time the squirrel rattled leaves, and freezing like a fencepost every time the critter stopped to look up.

It may have taken me a half-hour to stalk within good range, but when I got to where I thought I could take a shot, he suddenly sat upright on his haunches, flicked his tail once or twice and scampered up the tree. I gritted my teeth, eased into a sitting position and waited.

I guess that was my first real lesson in squirrel hunting with a rifle—patience. In later years I read that a true squirrel hunter will sit so long in one spot that moss will grow on the north side of his face and his eyelids will freeze open. Spiders will spin their webs from the bill of his cap to the upright rifle barrel between his knees—but he will sit there like a stone watching the crotch in the tree overhead, waiting for that gray head to peep over to see if the coast is clear.

I didn't have time to get the shakes. I already had the rifle in hand, and as soon as I saw the squirrel's head, I eased the gun slowly into position and was squeezing the trigger when the sights settled on their mark.

Such elation! I felt like a frog that had just shed its old skin! No, it wasn't just the fact that I'd killed a squirrel with a rifle, it was that I had done it *professionally*. I had stalked it, and I had waited, and I had shot it through the head just as old man Chapman had told me to. The rankest amateur, I thought, could have taken the squirrel with a shotgun in one tenth of the time. But all he would have had was a squirrel. I had something else—an inner pride of professionalism stamped in my soul as with a white hot branding iron.

How different I was when I finished field-dressing the squirrel and then continued easing my way along the ridge, picking each step like a barefoot kid in a chicken yard. No more tromping along with a shotgun held at port

arms, ready to throw a handful of shot that would cover a washtub at 30 yards. I was a pro.

I got only one more squirrel that day—another head shot as the critter stood up on a fallen log and stared at me, trying to determine whether I “fitted in” with the surroundings or not. Late that afternoon when I headed home, I took the dirt road and stopped by old man Chapman's place.

The old man was like a piece of putty, his face soft and weathered with a hint of moisture in the corners of his eyes as he examined the two squirrels. I saw his head nod approval, and without a word he turned back into the house to return a few minutes later with a heavy pair of sidecutters.

My eyes grew wide to the whites. “What are you going to do with them things?”

He put his hand on my shoulder and said, “Boy, now you're a squirrel hunter, an' now I'm goin' to show you how to clean 'em.”

### Never Forget

I'll never forget it. With a dexterity that comes only with experience, he nipped off their feet and tails, and then, pinching up the skin in the middle of the back between the jaws of the sidecutters, he made a short slit crosswise of the body. Next, as though skinning a rabbit, he worked his fingers through the slit and pulled both ways. In less time than it takes to write it, he skinned my two squirrels and sent me on my way.

Yes, that's been half a century ago. Old man Chapman has been long gone, but I still hunt squirrels along Mallory Run with a rifle. And if it takes me all day to get only one or two of the critters, it's still worth it to me. Because somewhere back along life's pathway, I can still feel old man Chapman's bony hand gripping my shoulder and hear his cement mixer voice saying, “You done all right, boy, good shot!”

Alburt Kent





# *Last Season's Discovery*

By J. James Faux

I DUCKED low to avoid an overhanging rhododendron branch, then paused to marvel at the mid-October leaves kaleidoscoping in the light breeze. A fresh sparkle had taken over the same old trees, promising new adventure with each step. The island seemed covered by an air of tenseness—the tightrope excitement of walking in on a point, gun ready, surveying the cover ahead for the flush. I expected a grouse or woodcock must be sitting in every clump, just waiting for the perfect moment to blast off. My memories of this covert, “Buttonbuck,” had nurtured me for five years, and now I finally had the opportunity to forge new memories. I was finally returning home. I gripped my shotgun tighter and recalled another opening day. . . .

My Weimaraner, Briar, had been a year and a half old for his first opening day. I’d trained him hard during the pre-season, and he was as primed and excited about it as I was. Buttonbuck had shown us quite a few woodcock and grouse during our September jaunts, so this swampy island nestled in the folds of a rhododendroned bank would be our first stop of the season.

By 7:30 we were working the lower part of the island, approaching the beginning of the black birches. Briar zigzagged through the cover about 50 yards ahead, showing his inbred diligence and desire. We’d been hunting only ten minutes when he started acting birdy: his stub-of-a-tail wagged excitedly and he slowed to a stealthy creep. Several steps later he stopped, locked on his first in-season point.

I couldn’t see the bird, but from the way Briar was acting it had to be almost beneath his quivering nose. Gun at the ready, I savored the moment before I walked in. As I neared Briar’s

frozen form, a woodcock rose straight up and whistled to the left toward the thicker cover on that edge of the island. My shot caught it before it could get its bat-like maneuvers into high gear. Briar raced to his prize and proudly returned with it. The hours of training, preparation, and daydreaming had crystalized into a moment of immense satisfaction.

Ten minutes deeper into the island and Briar was on his second point. I could actually see this bird, another woodcock, as I approached. It sat tight in the shadow of a gnarled apple tree, one of several reminders of a long-ago orchard. Despite the fact that I could see the bird on the ground, it corkscrewed behind the apple tree taking off and made a clean getaway.

Briar bumped the next bird and it flushed wildly, way out in front. A gentle but firm reprimand curbed his enthusiasm a bit, the result being another point very close to where that bird had flushed. This one offered an easy opportunity as it tried to cross a small clearing at the edge of a few alders. Briar returned with the woodcock almost before the sound of my shot had echoed away.

## **Swampiest Portion**

A half-hour spent working the thicker cover near the center of the island produced nothing, so we turned to the swampiest portion of Buttonbuck. Here the right side of the island is slowly reattaching itself to the mainland. What used to be the creekbed is now a swamp that extends right up to the rhododendron-covered bank.

Before long our efforts were rewarded by locating a bird sitting on one of the tufts of dry ground which stuck up out of the swamp. I tried to leapfrog from tuft to tuft to avoid

going into the muck over my boot tops—a rather tricky approach. Fortunately, the woodcock cooperated by flushing while I was perched conveniently on one of the tufts. A quick shot dropped it quartering to my right.

We finished up the bottom by continuing through the edge of the swamp until we had arrived back at our starting point on the island. Our opening day had been all I'd hoped for—and more. Buttonbuck had served up its first helping of contentment, a contentment that would become cushioned in familiarity as the years passed.

The mud made a soft sucking sound as I pulled my boot free. I eased my grip on the shotgun and looked around . . . suddenly aware that I had worked over half the island without producing a flush. It was a lot more difficult hunting this type of cover without a dog. But I still had a good portion of

the bottom to hunt, so I wasn't giving up. I thought of all the help Briar had given me on an outing here late in October in his fourth season.

The fog which had wafted in over the island burned off late, so it was 10:30 before Briar and I began to work the bottom. By then it was a delightful setting: the sun dappled through the treetops to make the leaves sparkle and pop like fresh bulbs on a Christmas tree. It promised to be a memorable Indian summer day.

### Slow Start

Our hunt started slowly. A wide sweep through the center of the island produced no birds and we circled around to the top end to work back through the edge of the swamp. For awhile, we worked through some good looking cover without any luck. But then the situation changed suddenly.

A small point of dry land juts into the swampy terrain here, about halfway down the island. One of the largest trees on the whole bottom stands there—an old oak. As we approached its base, Briar's birdiness changed to decision: a bird was in front of him. I caught up with him—almost. While I was still a good 10 yards away, a timberdoodle flushed straightaway. My two shots went unrewarded. A second woodcock flushing from the same spot was responsible for my third miss. I re-shouldered my Winchester 1400 to see if perhaps the barrel had somehow warped on me. Nope—it was as straight as ever.

A disbelieving look-back from Briar and a hasty reload and we were off again. He worked to the right, avoiding the real swamp to tenderfoot through the black birch tangles on its edge. His gray-ghost form was soon lost to view. I knew he was still moving, though, because the light tinkling of his bell continued. Then I didn't hear his bell.

It was so thick that I was thinking more of grouse than woodcock as I eased closer to where I'd last heard him. He soon came into view, a statue



**THE GROUSE** was a plump female. I fanned the tail and studied the soft resiliency of the feathers while Briar took a breather, looking as contented as I felt. We shared another sandwich and headed for the car.



gazing into a small cluster of trunks. I swung a little to the right, where the cover gave way a bit and an easier shot might result. The grouse had other intentions. It zipped from the cluster, angling away to my right. Luck was with my shot, though, and Briar returned with it and gave me an approving, “bout time” look.

Putting the grouse in my bag, I hurried after Briar. At last glance he'd been heading over to the right even more, but now all was quiet. A woodcock flushed abruptly. Briar bounded into view after the shot and eyed me questioningly. Evidently he'd been pointing this bird on the other side of the windfall.

Another 50 yards and the routine was repeated, but this time the woodcock fell to my second shot. I made an exchange from my gamebag when I put the woodcock in, and Briar and I shared a sandwich before continuing.

As the morning slipped away, we were still zigzagging through the birches. Ten minutes into the afternoon, Buttonbuck was again enveloped in silence. The low sigh that escaped my lips couldn't budge the serenity as I walked in on Briar's point.

This woodcock almost let me step on it. When it flushed, it catapulted straight up before leveling off at tree-top height—which was right where I caught it—before it got its horizontal flying gear into use. I was beginning to feel pretty cocky about my shooting.

But the next little feathered bombshell effortlessly humbled me. I emptied my gun's three-shot capacity—uselessly—as it flittered out over the swamp. What's more, this sorry performance was repeated on the next bird. At best I was making the woodcock think about heading south a little sooner than they intended to.

As we approached the lower corner of the island, Briar was once again acting birdy. He slowed to a stalking gait and then crept forward for three steps and froze. It was another woodcock. The stillness was shattered by one shot, and then Briar was giving me the bird.



#### Question

If I shoot a deer and find that it has been hit by a vehicle and is not fit to eat, do I have to tag it?

#### Answer

Yes, However, if you feel the deer is not fit to eat, it should be taken to a Game Protector. If the Game Protector finds the deer unfit for consumption, he will issue you a tag to take a second deer. This law applies to deer, bear and turkey. The entire animal, except entrails, must be turned in.

Its fine, buff-brown breast feathers were unruffled; the mottled feathers on its head and back were all still neatly in place. It was unmarked except where a single 7½ had creased its left wing and brought it down.

The bottom had produced a marvelous hunt. I decided to work through the rhododendron belt on the way back to the car—hoping for that elusive “second grouse of the day.”

By the time I had scrambled up the bank from the bottom, Briar had already made the turn and was working through the bankside cover. I hurried to catch up while his bell could still be plainly heard.

The first 150 yards were uneventful. We were at the little run that creases the bank to find its way down to the bottom. It was in this small ravine that I had taken a button buck during a previous antlerless deer season, and thus my favorite covert had acquired its name. But today we found no birds along the run.

I had just cleared the run's far bank when Briar's bell went silent for an instant. That instant's eternity was bro-

## Pennsylvania Game COOKBOOK



Pennsylvania Game Cookbook is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from GAME NEWS office.

ken by a grouse which blurred through the air for the protective goal line of thick cover ahead. But this time I was the quicker.

Smoke puffed from my barrel and the grouse crash-landed in a windfall of alders. Briar came rushing out of the rhododendron, and I hurried him over to where the bird had fallen. Instead of just digging itself into the windfall, the broken-wing bird took off on the run for the cover out ahead. But Briar was on its trail instantly, and a minute later I saw him with the

grouse in his mouth, head high, sauntering in.

The grouse was a plump female. I fanned the trail and studied the soft resiliency of the feathers. Briar took a breather, looking as contented as I felt. We shared another sandwich and headed for the car. . . .

The mist of memories clears from my mind and I realize that Buttonbuck has changed during the five years I was away. The bottom is virtually overrun by some sort of knee-high grass. This keeps woodcock away, since it's too much of an obstacle to probe through for worms. Most of the good grouse cover is giving way, too, and the windfalls and thickets which once were so abundant have thinned appreciably. My memory-compelled search of the bottom has not produced a single bird today.

The rhododendron belt still seems the same, and as I near the small run, a lone grouse flushes across the ravine. It doesn't offer a shot — though I'm not sure I'd try one at this point, anyway. Seeing the bird does bring a big smile to my face though.

Buttonbuck has changed, but not completely. The early-morning air still carries the acrid smell of the swamp's mist; the quiet that envelopes the bottom still makes my heartbeat seem so loud; and the leaves still smile back at the sun's caresses.

And while I understand that this covert has changed forever, I also realize that all the dramas played out there over the years will never be lost, that all are indelibly held in my memory, available for instant recall during a moment's idle daydream.

Someone once said that after you leave, you can't go home again. Last season, I finally understood that once you have a home, you never really leave it to begin with.



# A

# Taxing Solution



**By Bob Mitchell**

**Assistant Editor  
GAME NEWS**

**T**HE Federal Aid in Wildlife Restoration Act became law in 1937. It is often referred to as the Pittman-Robertson Fund, after its sponsors Key Pittman and Willis Robertson, or just PR. It was passed at a time when Congress and President Franklin D. Roosevelt were anxious to rescue the nation's workforce from the throes of our worst economic depression and our environment from overexploitation aggravated by years of widespread drought. It was a difficult time for people, and for wildlife, too.

The Pittman-Robertson Act was among several intended to help provide jobs, and to protect and restore natural resources. In essence, it directed that a 10 percent excise tax on sporting arms and ammunition—which had been levied five years earlier, but not earmarked for any particular purpose—be used to help state wildlife agencies restore dwindling game populations.

Under the original legislation, funds were made available to reimburse state wildlife agencies for up to 75 percent of the costs associated with land acquisition, habitat development, and wildlife research. The money each state was entitled to was based proportion-

ately upon its relative geographical size and its rank according to the number of hunting licenses it sold.

Pittman and Robertson instituted two provisions to ensure that funds would be used exclusively for longlasting wildlife conservation purposes. First, to be eligible for PR funds, state governments had to pass "assent" legislation guaranteeing that hunting license revenues would be used exclusively by the state's wildlife agency, and not diverted to support unrelated state functions. Second, states could receive reimbursements only for projects meeting certain criteria defined by the act. Game stocking, law enforcement, and public relations programs did not qualify.

Several significant amendments have been made since the Pittman-Robertson Act was enacted. In 1941, in anticipation of our involvement in WWII, excise taxes were placed on liquor, luggage, cosmetics and other commodities, and rates on those items already taxed were increased 10 percent. The tax rate on sporting arms and ammunition thus went to 11 percent. It has remained at this level since, although at the conclusion of that war, when many taxes were lifted

or reduced, sportsmen and the arms industries had to lobby to preserve this higher tax rate.

In 1941, the territories of Alaska, Hawaii, Puerto Rico and the Virgin Islands became eligible to receive PR funding; the territory of Guam was added in 1956, and in 1980 so were the Northern Mariana Islands in the South Pacific.

The apportionment formula was modified in 1946, because large states were receiving inordinately high amounts, while small states were receiving little. Maximum and minimum limits were established, stipulating that no state could receive more than 5 percent or less than one-half of one percent of the total annual amount available. This amendment authorized the use of up to 8 percent of the annual total to cover administrative costs of both PR and the Migratory Bird Treaty Act – the federal duck stamp program. These annual administrative costs actually have averaged less than 5 percent.

By the act's tenth year, most states were taking full advantage of its provisions, but a major problem became apparent. Many states could not afford the upkeep on facilities previously built or developed with PR funds. The act was again amended, authorizing reimbursement for expenses associated with the maintenance of roads, dams, buildings and other capital improvements previously built or acquired with PR funds.

Policies governing habitat management on State Game Lands were covered last month. The Bureau of Land Management has developed and implemented long term management plans for each Game Lands, designed specifically to provide the food and cover needs of wildlife. This month, the Federal Aid in Wildlife Restoration Act is covered. It is through this act that much of the wildlife habitat work conducted in the state is accomplished.

It's largely because of the emphasis placed on wildlife research by this act that the wildlife management field evolved so rapidly into a disciplined, multi-faceted science. Restoration, *per se*, soon became a low priority in many state management programs. Later amendments expanded the utility of PR funds to better meet the complex needs of wildlife agencies. In 1955, states became eligible for reimbursements to conduct a wider variety of game and people management projects. Predator control and game check stations are two examples.

In 1970, the 10 percent tax on handguns was added to the PR program, and so was the 11 percent tax placed on bows and arrows in 1972. Apportionments from these two particular taxes are made according to each state's total population, except that no state receives more than 3 percent nor less than 1 percent from these sources. Furthermore, only half of these taxes are included in the traditional PR apportionments. The other half may be used to support hunter education and the construction and maintenance of public target ranges.

Over the nearly 50 years since the Pittman-Robertson Fund was created, \$1.5 billion has been collected and distributed to the states and territories. Overall, a total of 4 million acres has been acquired for wildlife purposes, and habitat improvement projects have been implemented on 40 million acres of private land. Much of what is known about North American wildlife is based on research projects supported by PR funding, and nationally over 700,000 students a year receive hunter education courses.

Since 1938, Pennsylvania has received over \$55 million. Since 1980, annual PR apportionments have averaged over \$4 million. This year the Game Commission is entitled to \$3,344,127. Despite the state's relatively small size, thirty-third, Pennsylvania is entitled to receive a higher proportion of PR funds than any other state except Alaska and Texas because



more hunting licenses are sold here than in any other.

Over the years, Pennsylvania's PR funds have been used for land acquisition, wildlife research, habitat development and hunter education.

PR funds have made possible the acquisition of 176,934 acres of State Game Lands at a total cost of \$3,928,565. Three-quarters of that, \$2,946,424, was paid with PR.

Research projects on wild turkeys, white-tailed deer, woodcock, snowshoe hares, ring-necked pheasants and eastern cottontails were supported with PR funds, and much of the agency's overall management philosophies are based on information gleaned from these studies.

Other PR-funded research projects included evaluations of wildlife management practices on pipelines and mining operations, and an inventory of soil and cover conditions on State Game Lands.

Mammal surveys conducted in the '50s using PR funds represent the most authoritative accounts of mammalian

distribution in the state. (A project designed to replicate and update this 30-year-old survey was recently funded by the Wild Resource Conservation Board, Pennsylvania's income tax checkoff program.)

Some of the commonwealth's most attractive spots for wildlife and people were developed with PR funds. Conneaut Marsh, a 555-acre impoundment in Crawford County, is one such example.

Half of Pennsylvania's share of the handgun and archery taxes may be devoted to hunter education, but the Game Commission exercised this option only from 1971 through 1974.

Detailed progress reports and expense accounts must be filed regularly for each project supported with PR funds. It's the direct responsibility of the chief of the Bureau of Land Management's Federal Aid Division and the six regional Federal Aid Coordinators to make sure all PR requirements and reports are satisfied. By placing Pennsylvania's entire PR allotment into land management activities, more

**THE AGENCY'S public access programs are administered largely with PR funds. The needs of both wildlife and hunters are provided on over 4.4 million acres of private lands enrolled in these programs.**



is invested in wildlife conservation and less on administrative costs.

Today, the state's entire PR allotment is used for habitat development on State Game Lands and properties enrolled in the Commission's public access programs. This habitat development project was initiated over 30 years ago, when it was among many funded with PR apportionments. It has since grown into an extensive project that now utilizes Pennsylvania's entire share of this tax.

Much of the management practices conducted on State Game Lands (discussed in GAME NEWS last month) are part of this project, and so is administration of the agency's cooperative access programs.

### Forest Inventories

Forest inventories, timber stand improvements, preservation of mast and den trees, and the preparation of cutting sites are covered.

Construction, erection and maintenance of wildlife nesting devices are part of this project. This year, approximately 1200 nesting devices will be built and erected, bringing to 7000 the number of artificial boxes and platforms maintained by the Game Commission.

The operation of Howard Nursery is partially funded with PR monies, as is the planting of trees and shrubs produced there. Approximately 3 million nursery trees and shrubs will be planted this year, providing additional wildlife food and cover on State Game Lands and leased properties.

PR funds are used to create and manage herbaceous openings and wetland areas. This year, 103 acres of new openings are planned, and 558 ponds and dams will be inspected and serviced.

Boundary work is also included. In addition to maintaining 1940 miles of previously determined borders, 140 miles of new boundaries will be surveyed and marked in coming months.

Leasing, mapping, and posting costs associated with the Farm-Game,

Safety Zone and Forest-Game Cooperative projects are eligible for PR reimbursement, as are the seedlings, seed packets, border cuttings and technical assistance provided cooperating landowners. Sportsmen enjoy access to over 4.4 million acres of private land through cooperative projects, largely financed with these federal funds.

PR funds are also used to encourage public use of State Game Lands. Roads, bridges, gates, parking lots and bulletin boards for posting information signs and notices are all provided through PR. This year, 64 bridges and 1900 miles of service roads and trails will be maintained; 82 new gates will be added to the 1160 already standing; 800 State Game Lands parking lots will be cleaned and graded, and 25 new ones will be constructed; and 111 bulletin boards will be erected and the 900 now in place will be serviced.

The Federal Aid in Wildlife Restoration Act (the PR Fund) has proven to be the most significant piece of wildlife conservation legislation ever enacted. Its success can be attributed to the foresight of its sponsors and to the sportsmen and arms industries who have vigilantly maintained the act's integrity for the past half-century.

The assent legislation required by the act undoubtedly has protected state hunting license revenues from being incorporated into general state coffers and used to subsidize other programs.

The emphasis on land acquisition, habitat development, wildlife research, and hunter education limited the use of these funds to only the most worthwhile purposes, and advanced wildlife management into a refined science.

Hunters and shooters have been underwriting wildlife conservation since the turn of the century, directly through hunting license purchases and indirectly through the excise taxes on shooting equipment. And because of these programs conditions are better for wildlife and for everybody who enjoys the outdoors.





**I CAUTIOUSLY TURNED MY head. I was looking right at a bear. Now the muzzle of my rifle was turning. With the sights on the mass of black, my thumb brought the hammer back to firing position.**

# Black Bear With a Muzzleloader

By Denny Yale

As told to Charlie Burchfield

**I**T WAS A dream come true. Here I was at the bear check station at the Game Commission's training school near Brockway. The bear I'd shot was a big male, tipping the scales at 307 pounds. It was the second largest bear to be examined at this station, and the only one taken with a flintlock rifle.

I had shot my first bear during the 1970 season, not far from my hometown of Brockport in Elk County. A satisfying experience to say the least. Over ten years passed before the urge to hunt black bear once again began to haunt me. The 1982 season rolled around, but I didn't apply for a bear license and couldn't hunt. Deep in my heart I wanted to be out there. But this time I wanted it to be different. My next encounter with a black bear would find me using a 50-caliber Thompson/Center flintlock rifle.

The goal of taking an animal the size of a black bear with a muzzleloader was a challenge, one that would require a lot of study and research. I read everything I could find that dealt with black powder hunting and bears. In doing so, I learned that to take an animal the size of a bear I would have to fire a large projectile propelled by a stout load. As there is no such thing as a standard cartridge when using a muzzleloader, some testing had to be done.

Developing the right combination took time. For weeks on end I was a regular visitor on the rifle range, testing and evaluating. Finally I settled on a 370-gr. Maxiball and a heavy charge of FFg black powder for my T/C Renegade. I figured this type of slug would deliver better penetration than a round ball on an animal as massive

and powerful as a bear. The load performed well, producing 3-inch groups at 85 yards from the open-sighted rifle.

Another advantage to spending time on the range was that it provided me with plenty of practice and confidence that my "primitive firearm" was capable of its intended task.



**I HAD SHOT my first bear in 1970. Now I had the urge to hunt these big animals again, but I wanted it to be different this time. So I decided my next hunt would find me using a 50-caliber flintlock.**

For some hunters, going for black bear is a matter of ignoring the odds and just relying on lady luck. As a matter of fact, the success rate for bear hunters in Pennsylvania is about 1½ percent—just about one-tenth that of successful buck hunters. It is easy to see how the odds are stacked against the bear hunter. My brother-in-law Jeff Jamison and I wanted to tip those odds more in our favor.

Preseason scouting was a must. Jeff and I knew of a place in which several bears had been seen. We decided to thoroughly scout this area and try to learn which parts the bears were frequenting, their routes of travel, and their bedding areas. For two months prior to the opening of bear season, we undertook an extensive campaign to locate the bears. The work paid off.

Each trip afield we found tracks and droppings, and on several occasions we made sightings, all confirming that we were working in the right location. At the same time we gained some understanding of the game we were pursuing. Our hours and days of scouting accumulated quickly and as

the season approached we had information on the movements of five bears.

Wake-up time on opening day came well before daylight. I met Jeff, along with Larry and Dave Himes, at the home of Jeff's father. We traveled to the area and each of us took one of a number of choice stands, all within a half-mile of one another. As morning light brightened the woods, distant shots echoed across the hills. I wondered when it would be my turn—a thought that probably enters every hunter's mind as the excitement of the hunt builds.

But things were slow. I was sure this was the right spot. But where were the bears? At lunchtime Jeff and I met, not only to share hot coffee and sandwiches but also to compare notes on the day. We decided to stick it out. Sooner or later one of those bears had to come through the area.

By 2 o'clock I had reached my limit. I was scheduled to work the second shift at Brockway Glass, and had to leave the woods soon. It was hard to go to work. We felt sure a bear would come. It had to be only a matter of time. But I had to go. When I arrived at work, all the talk was of bear hunting, who had shot bears, and all the other particulars of the first day's hunt. I kept thinking I had to be in the same area the next day.

### Few Hours Between

It came fast, for the hours between the close of the second shift and the early wake-up time for the second day's hunt left few hours in between. Again the morning air was cool and crisp; but this day's hunt brought with it a certain amount of apprehension. Jeff had learned that several bears had been taken in the area the previous day and wondered if we should return there to hunt. Nonetheless, I was confident that several bears still remained there.

Our tactics would be the same as the day before—split up, hunt, then meet at lunchtime to evaluate the situation.



We wished each other good luck and separated. I took a stand at a place where we had seen bears on several occasions. But like the morning before, action was slow. So at 9 a.m. I decided to hunt my way to a new location, moving about 50 yards at a time. My goal was a nearby clear-cut. By 10:30 I had reached it. I headed for a large tree that I could climb up on; this would put me about 10 feet off the ground where I could see better. It was a perfect place to watch the multitude of trails that zigzagged through the thick new growth.

### Only Minutes Later

It didn't take me long to become comfortable on the new stand. And only minutes later there was a snapping of branches within the cuttings off to my left. Something was moving toward the tree I was in. Then I could see them—several deer. They passed by on their way through the cutting. Watching approaching game always gets the adrenaline flowing but with the deer gone it was time once again to settle down, wait, and watch.

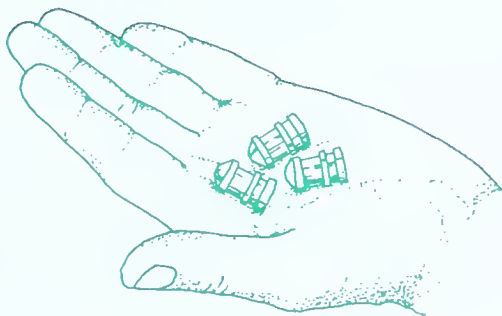
Just as suddenly as the group of deer had come and gone, a twig snapped at the end of the limb I had used to climb up to reach the stand. I slowly turned my eyes and then, cautiously, my head. I was looking right at a bear. Now the muzzle of the rifle was turning slowly, along with my body, in order to line up on the bear. Finally, with the rifle shouldered and the sights on the mass of black, my thumb reached up to bring the hammer back in to firing position. As it reached full cock, it made a loud click.

The sound was not overlooked by the bear. He looked directly up at me. Now came the moment of truth. A squeeze of the trigger, a snap of the flint, and the rifle roared. A mass of smoke rolled out. As the enormous white cloud billowed, I could see the big bear stagger. Then he ran, disappearing into the thick growth of the clear-cut.

My reaction was immediate: get

both feet on the ground, reload, and at the same time make some fast decisions. As there were other hunters in the area and the bear had been hit hard, I decided it was best to wait for only a few minutes before beginning to follow the animal.

Following the blood trail was easy. The almost broadside shot obviously had inflicted a tremendous amount of damage. The bear went about 150 yards through the clear-cut and on to a tram road. It followed the road for a distance, then went down the embankment and headed into another clear-cut that led into a swampy bottom. I decided to sit and wait at the tram road, not to push the bear, but rather let it lie down and die. After only a few minutes shots began to ring out. One right after another, coming from the general direction my bear I had gone. Such a situation can worry any hunter. I decided to follow the blood trail and see if the shots fired were at another bear or at the one I had hit.



**DEVELOPING** the right combination for my Thompson/Center took time. Finally I settled on a 370-gr. Maxiball and a heavy charge of FFg black powder. I figured it would give better penetration than a round ball.

It was tough going in the cuttings. Thick undergrowth limited visibility to less than 10 yards in any direction. As I approached the bottom of the hill, a bear bolted out of the brush just ahead of me. Even though I was startled, I was glad the shots I had heard earlier had obviously been taken at another bear. Then just as I was about to resume tracking, only a short distance ahead of me the report from a high powered rifle rang out. The sound

could mean only one thing; the hunt was over.

Disappointed, I emerged from the clear-cut to see a hunter standing over the bear, the same one I had shot a short time before. The hunter looked at me, smiled, and said, "Here's your bear. It tried to climb the bank and couldn't, since it was almost dead. I heard you coming after him, so I made sure he wouldn't go any farther."

The other hunter was Bill Castina of Brandy Camp.

**Got Job Done**

The slug from my flintlock rifle had done its job. It had entered the animal's left side, breaking the shoulder. From there it passed through the chest cavity and exited, breaking the animal's right leg.

All the while Jeff was closing in on the area. He had heard my voice coming from the bottom, so headed in our direction. His arrival was timely, because after the kill the real work be-

gins. While I tagged the bear and began to field-dress it, Jeff returned to my four-wheel-drive with our guns, then drove it out the tram road as close as possible to the bear. Upon his return, Jeff, Bill and I began trying to get the bear to the vehicle.

The going was tough and slow. First of all, the area was thick with new growth. Combining this with the fact that this was a big male, we had a real job on our hands. We tried several ways to move the bear, all of which met with limited success. The best method was for Jeff and Bill to pull while I lifted and pushed the animal from behind. At best, we moved only a foot at a time. It took the three of us over two hours of steady work to move the bear a mere 200 yards. And believe me, it sure was hard work.

Even so, it was worth it. All the pre-season scouting and hard work had paid off. And isn't that what hunting is all about? Especially when hunting black bear muzzleloading style.

**GAME NEWS**

Enclosed find check or money order for \$\_\_\_\_\_ for my subscription to **Pennsylvania GAME NEWS**. **Remittance must accompany order.**

☐ NEW    ☐ RENEWAL    \_\_\_\_\_ ACCOUNT NUMBER

*(Check One)*

**In U.S.**    ☐ 3 Years \$16.50    ☐ 1 Year \$6.00

**To Canada and all foreign countries**  
☐ \$7.00 per year in U.S. Currency

Name \_\_\_\_\_  
*(print plainly)*

Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
*(Zip Code)*

NOTE: All remittances should be made payable to the  
**PENNSYLVANIA GAME COMMISSION**  
Mail payment to **GAME NEWS**, P.O. Box 1567, Harrisburg, Pa. 17105-1567  
**DO NOT SEND CASH**

Please allow 60 days for first copy.





I SPENT MONDAY 100 miles away, leaning on a hemlock doused in rain while whispering 25 horn-growing prayers—one for each of the bald whitetails that pranced past me from all directions.

## *My Cabbage Patch Buck*

By Denny Kolakowski

MY FELLOW office and hunting cronies were jealous. The weather forecast predicted a minimum of three inches of snow to hush the forest carpet that until then had crackled like potato chips underfoot. Most of them had drunk their vacation time dry with the last sip on opening day.

I'd had Monday off, too, and spent it a hundred miles away, leaning on a gloomy hemlock, drenched in rain while whispering 25 horn-growing prayers; one for each bald whitetail that pranced past me during the day. Some scampered by, but most dropped from the dripping heavens to nose through my little spot of Warren County woods with little concern. I'm convinced they knew just how harmless a 5-foot 10-inch orange sponge planted at the base of a hemlock on opening day of buck season really is.

And even though wives just aren't designed to comprehend it, that weekend after Thanksgiving at my dad's camp is a truck load of merriment just the same. A good many times these excursions *do* bear fruit, as attested to by the adolescent smirk that alters my father-in-law's jaw each time he focuses on the 13-point that branches out from his living room wall.

That trophy fell two years ago, and he still rides my back about the 4-point statue I missed earlier the same morning. I remind him that his baker's-dozen rack would have found us dragging out an undersized cousin if I'd been a better shot, so his 30-06 would never have had a chance. This usually shushes him up and makes me appear to be some sort of a strategist. But the fruits of our camp outing this year included my brother's spike, my cousin's 6-point, an all day rainstorm, and my

welcomed discovery of a half-day vacation to up my chances near home.

The arguments that favor home front hunting are admittedly worthy. You save gallons of gas and hours of time. Also, the chances of bagging a trophy are higher here than up at camp. Cornfields and scattered apple trees make these backyard deer heftier and crown them with stockier spreads. But you just can't duplicate that escape to the northwoods where your breath fogs colder and the cabin walls are coated with a special fraternity.

The woods grow dramatically different here. They scrunch in beech, maple and blossomed tangles, rather than endless stilts of hardwood. Where tumbled rock splash with steep springs a hundred miles north, islands of dogwood, goldenrod and crabapple dot ravines that make you stalk with a dia-

mond-cutter's control. After all, the whitetail resides 365 days and nights per year in this maze, and your wide footsteps testify that you do not.

Late Friday morning found me snapping my seatbelt in the company parking lot, itching to engulf myself in the snarled limbs behind my house. I squinted for the first specks of snow the weatherman had promised.

### Tea and Taffy

A quick gulp of steaming tea and a handful of saltwater taffy stuffed into my shirt pocket by an understanding wife, then the cellar door slammed shut behind me and the 300 Savage that hung at attention on my shoulder. The legs of my orange suit were stained with north country mud from Monday's hunt. I'd told my wife she could wash it only after I cleaned my rifle for the last time this year. It just didn't seem fitting to churn the poor thing back to spotless blaze at mid-season—as if that would domesticate it somehow.

Our son Justin beamed from his bedroom window as I crossed the subtle threshold between our backyard orchard and the woods. He answered my thumbs-up gesture with hands frantic as butterflies. It's recollections like that that you tote with you all through life and dust off when you need to be perked up.

I admit to keeping watch over the local whitetail herd as they inspected my lawnwork in the summer evenings, but I've signed at least five hunting licenses since the last time I invaded their territory. In that time the woodland has congested itself with sycamore, hornbeam and chokecherry saplings where the elder timber dropped. My steps were noisier than I remembered, but the apple trees were still connected with muddy hoofprints like Justin's dot-to-dot games.

Occasional buck rubs were visible in the gloom. Somewhat amazed by this local whitetail activity, I began to re-evaluate the merits of that opening day journey to the far north.



**MY GAZE LEAPED** ahead to a gray-brown body under a thorn tree. I ran to my prize—but saw no antlers. I was shocked motionless. I jerked up his head as if trying to revive him. . . .



The farmer who pays taxes on this property possesses oceans of patience in constructing treestands but trickles for sitting on them. He often told me to use them whenever I pleased, but until this afternoon I had never considered doing so. But after an hour and a half of slinking about, I decided to take him up on his offer. I climbed into a stand overlooking a dry creekbed that led to an unharvested cornfield. From my vantage point I delighted in a pair of cottontails weaving through the battered blackberries, downy woodpeckers telegraphing secret codes through the treetops, and bands of crows that scanned the December sky like screaming Indians.

I began to take notice of the snow grains settling for as far as I could see: a delicious sign for deerhunters and nervous weathermen. This triggered thoughts of my co-workers daydreaming out the windows, scheming the next day's hunt.

The constant surveillance required to make a treestand an effective hunting tool makes one forget the minutes slipping by and the steady fall of flakes that gathers to illuminate the forest bottom. It took a taffy break to make me note the inch-plus of winter that concealed my path to this oak. It accumulates quickly when your mind is reciting ghosts of whitetails.

The snow soon measured three inches and took its toll on my bare hands. Each time I glanced at my clinched fists I could visualize my dry snowmobile gloves on the basement workbench soaking up the furnace. So with my rifle barrel imitating one long icicle and no deer in sight, I dismounted and made tracks in the virgin snow.

A while later I was looking at a large shagbark hickory with an empty platform. The 2 x 4 ribcage stood watch over a sweeping valley that held many similar-age hickories. As a rookie I had shot at many a squirrel under these nut trees, and even carried home some for stews. To my left was a tumbleweed of slashings that was sure

to be the route of any skulking buck headed to or from two fields that straddled a stand of locust at my back. Yep, tomorrow I would plant myself here with a headful of theory and a heartful of hope.

Satisfied with my decision, I marched homeward with the solitude of my hunt fixed in my thoughts. The afternoon had provided the reacquaintance of a turf taken for granted and the planning for this season's first Saturday.

With all ingredients for a good hunt stirring in my cranium, the most essential being an early morning rise, of course, my lovely wife dropped the bomb on me after supper. It seemed Vickie had been inflicted by a condition I could refer to only as "cabbage patch fever." This normally reasonable girl was obsessed with the mission of purchasing one of these collector's item dolls as a Christmas present for our six-month-old daughter. She was willing to leave our warm home and chance slippery highways for the privilege of standing in line in front of a closed store in hopes of making Chelsea the proud owner of a Cabbage Patch Doll. Chelsea would in turn demonstrate her gratitude like any six-month-old: by gumming the doll's feet the same as she did with all of her other dolls.

### Insanity vs. Spirit

I'll spare you all the dialogue that arose from this conflict of Saturday morning plans, but I couldn't for the life of me get her to understand the vast differences between the insanity of her intentions and the spirit of determination in holding up a hemlock for eight waterlogged hours. Well, not completely convinced myself, and with the persuasion of Chelsea's angelic gurgles, we agreed Vickie would have until 11 a.m. to return with the doll, in time to see me off in my quest to fill the freezer.

Thus, 10:15 Saturday morning found me bidding my wife, kids and Cabbage Patch Doll so long. To be

honest, my hopes were deflated somewhat by my late starting time. Sitting at the kitchen table with my eye on the clock and a wet diaper in my hand, I had envisioned my buck zigzagging under that empty stand at dawn while Vickie froze her toes as she waited in line with Christmas morning dolls dancing in her head. There was nothing left to do but make the most of the remainder of the day.

### Expectations

The platform sat vacant, and I could see no boot tracks nearby. Refreshed by my aloneness, I grunted up the snow trimmed rungs. Expectations continued into afternoon, with the twitches of chickadees and the sailing by of an occasional hawk my only visual activity. Occasional cups of hot tea and candy breaks marked the pace of a passing day haunted by the shadow of a late start.

It was 2 p.m. as I sipped my last steaming cup and a silent movement flickered in the corner of my eyesight. I turned to catch sight of a single deer the length of a football field away, trickling parallel to the fenceline that led to my tree's trunk. The flash of a "halo" above his ears brought my gun up.

Suddenly at 60 yards he paused to study a thicket that must have beckoned him from below. Would he jump the rusted wire in an instant to dissolve into cover? I'd be forced to squeeze at the slightest broadside turn. I held my breath, hoping he would resume his original path.

In an instant that hung like a dream, he swung sideways and my 300 split the winter air. The buck simply disappeared, leaving me gawking at

his getaway. I couldn't shimmy down fast enough to investigate. The snow was unstained. My head shook, blank of excuses. I couldn't blame it on my wife anymore.

Then after a minute or so of haphazard tracking, I saw one scarlet speck. Then more. My gaze leaped ahead to a gray-brown body under a thorn tree. I ran to my prize—but saw no antlers. I was shocked motionless. A thousand explanations collided in my brain. I jerked up his head as if trying to revive him. His fall had buried a tall 5-point antler in the snow. The matching half had been shed at a past location lost in his silence. He was a trophy to me just the same.

As I attached my nylon drag rope I imagined my buck's stature as a full 10-point. I delighted in the vision of the midnight maneuvers he must have run in my backyard while I snored close at hand.

As my buck finally slid to a halt in my driveway, I figured I'd venture north again next year, but the pressure of opening day will be lessened by my local buck on this first Saturday. No, I don't pretend to believe for a second that this could happen just the same next year or any other. But the memory will be comforting to me just the same.

I swung the front door open to showcase my success. Justin's face exploded with a glow usually reserved for new toys. And while my wife has wrapped uncountable hugs around me through the years, none ever felt warmer than that one which she hung like a wreath as she whispered . . . "See, you got your Cabbage Patch Buck."

My smile was unerasable.

## Thoughts While Walking

*What good are forty freedoms without a blank spot on the map?*

—Aldo Leopold





# FIELD NOTES



## 75th Birthday

**TRAINING SCHOOL**—While on weekend leave last July, I attended the National Scout Jamboree at Fort A. P. Hill, Virginia. Over 30,000 Boy Scouts and leaders from throughout the United States and many foreign countries spent ten full days participating in numerous activities, programs, and enjoying each others fellowship. This was the highlight of the B.S.A.'s Diamond Jubilee Year. —Trainee Richard J. Shire.

## Afraid So

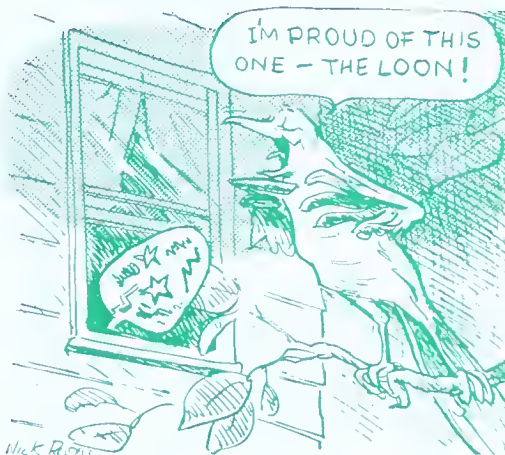
When leaving the house I noticed a scuffle on the roof of my wren house between a little brown bat and a house wren. The bat kept trying to get into the bird house and the wren kept chasing it out. After several minutes, the wren chased the bat into the grape-arbor and emerged alone, apparently the winner. I guess there's a housing shortage in the bat world, too. —LMO Jim Deniker, Sandy Lake.

## Caught

**CLARION COUNTY**—While fishing in the Tionesta area, Deputy Jeff Longe cast a worm into the lake. A young woodduck scooted out from the bank and grabbed the bait before Jeff could pull it away. Jeff broke the line to free the bird rather than attempt to retrieve the duck and cause any injuries. When Jeff reported the incident to me, he became rather upset when I told him people had been feeding the young ducks, causing them to lose their fear of humans. I never could—and now Jeff can't either—understand why people can't just watch and enjoy wildlife without trying to make pets of them. —DGP Gordon Couillard, Clarion.

## Two Rare Ones

**McKEAN COUNTY**—Eric Erickson was going to work on the Elk State Forest when he observed a hawk wrestling with another large bird on the ground. The hawk had a young great blue heron in its grasp. The heron, which was every bit as big as the hawk, put up quite a struggle. A few days later I flushed a grouse and her brood out of some blackberry briars. One of the young flew into the woods where a lot of wing flapping and leaf rustling immediately took place. A closer look showed another hawk, trying to carry off the grouse. In both of these instances, the hawk was a goshawk, one of Pennsylvania's rarest birds of prey. —DGP John Dzemyan, Smethport.



## Or Within Earshot

**LUZERNE COUNTY**—There is no doubt why the mockingbird is so named. On two consecutive mornings one sat outside our bedroom window from 1 a.m. until daylight, imitating the call of every single species of bird that has ever been in or flown over the Commonwealth. Yes, my patience was worn thin. —DGP Robert W. Nolf, Conyngham.



### Hooked

**DAUPHIN COUNTY**—While bass fishing on the Susquehanna with two of my deputies, I pointed out a large patch of cardinal flowers on an island shoreline. One figured I was talking about those red flowers next to the water, and he was quite proud of himself, as he really knew nothing about wildflowers. Sometime later, though, I got to talking about Blue Stren, referring to the type of line I had on my reel, and there was Steve, scanning the shoreline for another wildflower. — DGP Scott R. Bills, Millersburg.

### Gotcha — Almost

**WAYNE COUNTY**—A Girdland farmer herding cows down his lane was startled to find he had an extra one. He was even more surprised when he saw the extra cow was a bear. Fortunately, he learned this before he tried to hook the bear up to the milking machine. — DGP Donald R. Schauer, Honesdale.

### Good & Bad

Because of all the rain we had in June, many farmers could not get their hay cut until early July. This didn't make the woodchuck hunters happy, because few places offered long range shooting. But pheasant hunters should be smiling because this gave more hens time to hatch their eggs. — LMO R. B. Belding, Waynesburg.

### Small But Determined

**TRAINING SCHOOL**—While on my way back to the training school I saw a roadkilled animal on the centerline of the highway. I slowed down and saw that it was a large dead woodchuck with a very much alive mink attempting to drag it to the berm. The mink was not making much headway. It was probably difficult just dodging the heavy traffic, but since the mink probably weighed less than two pounds, I'm sure its hands were full trying to pull a 10-pound chuck. As I looked in my rearview mirror, the mink was still dodging cars and yanking on its prize. I'll never know how he made out. — Trainee John McKellop.

### Day's Good Deed

**HUNTINGDON COUNTY**—This past June, Food and Cover employees Roy Brechbiel and Tom McManus were working on SGL 67 when they heard a bleating sound coming from the woods nearby. They found a fawn with several porcupine quills imbedded in its nose. They caught the deer, removed the quills and were able to return the fawn to the wild, as good as new. — DGP Don Adams, Waterfall.

### Bad Signs

The Food & Cover crew re-marking the boundary of SGL 84, a 20-mile-long tract along Line Mountain in lower Northumberland County, has had a difficult time penetrating the thick new growth where trees died after being hit hard by the gypsy moths several years ago. This high priority project has been proceeding so slowly that the other day, when foreman Dick Dinkleberger's teenage son Jeffrey was horseback riding, he noticed several turkey vultures circling over an area and found the scavengers were homing down on his dad and the rest of the crew, struggling at a snail's pace through the brush. — LM Richard W. Donahoe, Danville.



## We Do Things Differently

I scheduled a Game Lands tour in July for a group of foreign exchange students. The tour was rained out, but that gave us time for lengthy discussions. I explained how Game Lands are public lands, managed for wildlife and outdoor recreation, and then discussed hunting here. Most found it incredible that for only \$12.50 and a hunter education course a person was entitled to go hunting. Even more amazing to them was that hunters don't have to check in and out of Game Lands and have an officer accompany them while hunting. But most amazing, based on the fact that they kept asking about it over and over, was that hunters here are allowed to keep the game they kill. — LMO Ken Zinn, Jersey Shore.



## Never Know

**GREENE COUNTY**—While on patrol during June, I chanced upon something that still has me puzzled. Along an isolated road I noticed a fox squirrel standing quietly—I actually reached down and touched it and it did not react at all. Then I noticed about two feet away a large black-snake. Was this squirrel hypnotized or “charmed” as many persons claim a snake can do, or was the squirrel just being still so the snake could not locate it? Or had the snake been threatening one of the squirrel’s young. Or . . . — DGP Robert P. Shaffer, Carmichaels.

## Crossfires

**TRAINING SCHOOL**—While shooting on the police survival course here, it seemed I had either been out in the sun too long or had been issued extra slow ammunition. Whenever I shot there was a one or two second pause before a hole appeared in my target. This happened several times before, with some relief, I realized that the trainee next to me was shooting at my target by mistake. It worked out great, though. I achieved my highest score to date—75 out of a possible 60! — Trainee Arthur S. Hamley.

## Or Learn the Technique

**TRAINING SCHOOL**—It’s starting already. While home on weekend leave I was approached by a local resident who was aware of my new affiliation with the Game Commission. After a brief moment of conversation he proceeded to ask, “What are you guys doing about the pheasants?” I didn’t have the answer he wanted to hear, and he left with this comment, “Well, I hope you do something.” I guess these questions come with the territory and even a trainee should have all the answers. — Trainee Donald G. Chaybin.

## That Time, 80 Percent

One day in mid-July, well known Raystown Lake anglers Bob and Barb Clapper were fishing the impoundment when a hen turkey flew across the lake and began calling. It called almost continuously for nearly 30 minutes. Later, when the couple investigated what they thought were carp surfacing in the water, they discovered 10 chicken-size turkey poults swimming across the lake toward the hen’s calling. Only eight survived. At least two drowned during the attempt. This is a prime example of nature’s survival of the fittest. — SIE H. Wes Bower, Huntingdon.

## They Don't Move Away

**ADAMS COUNTY**—Many of the comments I received about rabbits being plentiful in the summer were followed with questions about where they all go when hunting season comes. There are many answers. While driving local roadways, keep track of the miles and the number of roadkilled rabbits you see. Multiply this by the miles of roadways in the county. Are you getting the picture? Add disease, predation, natural mortality and weather-related losses and you should be able to figure out where a large percentage of the rabbits go. — DGP Gary Becker, Aspers.



## Trick Me Once . . .

**MONTGOMERY COUNTY**—Mr. Levi Landis, Harleysville, asked what could be done about raccoons raiding his sweet corn. I gave him several alternatives, including live-trapping or placing a radio turned to a talk station in the corn patch. Mr. Landis stated that he had used the “radio trick” last year, and it had worked. When he tried it again this year, however, the bag which contained the radio was torn open and the radio, covered with muddy footprints, had been turned down so low it couldn't be heard. Needless to say, Mr. Landis tried the livetrapp this year. — DGP Doug Kilough, Pekiomenville.



## Can't Be Outdone

**BUCKS COUNTY**—Many people overreact to animal problems, but I found it incredible that on the day after the first reported sighting of a “killer bee” in the country I got a call from a man who said he'd just spotted one here. — DGP Cheryl A. Trewella, Trumbauersville.

## Durable

**CLEARFIELD COUNTY**—Looking down through a valley where a tornado had just gone through, I was struck by the fact that only one structure seemed untouched—a beaver dam and lodge. In every direction within several hundred yards, everything was destroyed but that dam. It was still holding back the stream as though nothing had happened. — DGP Don Zimmerman, Drifting.

## Signed, Frank Young

Mr. Lee Shaffer, Boswell, reports that two young men recently sent him a “thank you” card and note stating, “We caught 120 muskrat, 1 mink, and 19 raccoon this fall. We caught 23 muskrat, 1 mink, and 1 raccoon off your land. Thanks again for a great season.” If more of this kind of appreciation were bestowed upon landowners, we sportsmen would find a lot more open land. — LMO Barry K. Ray, Sr., Rockwood.



## Friday

**TRAINING SCHOOL**—As one of the few trainees without previous Game Commission experience, it was more difficult for me to learn many of the abbreviations used by agency personnel. Among these are T&A (Time and Activity Report), IES (Information and Education Supervisor), LES (Law Enforcement Supervisor), DGP (District Game Protector), and RKD (Roadkilled Deer). One abbreviation, however, is understood and welcomed by all, TGIF—Trainee Robert L. Prall.

## Inhibitors

**MONTGOMERY COUNTY**—When a woman complained about a dead skunk on her lawn, I explained how skunks are beneficial because they eat a lot of mice and insects. I even thought my argument in defense of the skunk was responsible for an apparent reversal in her attitude, but then she exclaimed, “I think skunks are good to have around because they discourage prowlers!” So it goes in Metroland where urbanites are always thinking of strange new ways to utilize our wildlife.—DGP William Wasserman, Montgomeryville.

## Cooperation For All

**CRAWFORD COUNTY**—Hunters, trappers, birdwatchers, and everyone else who appreciates the wetlands in this county should be pleased to hear of the Game Commission’s new Aquatic Vegetation Cutter, purchased with the assistance of Ducks Unlimited. The cutter was busy from early spring through summer, opening up marshes choked with vegetation. This procedure makes these areas more accessible to outdoorsmen and more inviting to waterfowl and other wetland animals.—LMO Keith Harbaugh, Meadville.

## And the Rattles

**LUZERNE COUNTY**—Prior to picking up a new state vehicle in Harrisburg, I had to clean out the trunk of my old one. In it I found several items I had long considered lost—a fluorescent orange hat, a dog leash, a snare, a waterfowl I.D. book, some hand cleaner, and a deer’s jawbone. Now I know what that funny smell was last summer.—DGP Edward J. Zindell, Wilkes-Barre.



## Back and Forth

**ELK COUNTY**—Mrs. Ray Reed from West Creek told me of how she and her family watched beavers build the breastwork of a dam that backed up water into their yard. It appeared the adults were teaching the three young how to carry construction material. The adults used the branches and twigs they brought to the dam site, but the young carried the same loads on round trips across the lake.—DGP Harold Harshbarger, Kersey.

## Crackin’ Down

**GREENE COUNTY**—Recent Game Law violators have been getting stung a little deeper lately. Not too long ago, most out-of-season deer killings resulted in the offender getting a three-year hunting license revocation. But a couple of the most recent violators received five-year revocations and another fellow won’t be eligible to hunt until 1992.—DGP S. A. Kleiner, Waynesburg.

# Bear Check Stations

**B**EFORE ANY BEAR lawfully killed in Pennsylvania may be possessed beyond twenty-four hours, the Game Law requires that it shall be taken to a Game Commission check station for examination. Successful hunters are advised that they can have their bears examined at the following check stations:

*Northwest Division*—Northeastern Forest Experiment Station, Rts. 6 and 62, near Irvine; Allegheny National Forest Storage Shed, Marienville; Ross Leffler School of Conservation, seven miles northwest of Brockway off of Rt. 28; Northwest Division Office, three miles south of Franklin, Rt. 8;

*Southwest Division*—Southwest Division Office, 339 W. Main St., Ligonier; Yellow Creek State Park, off Rt. 422, Indiana County;

*Northcentral Division*—Trout Run, at intersection of Rts. 14 and 15; PGC Storage Building, State Game Lands 208, three miles north of Gaines on Rt. 349. Lantz

Corners, intersection of Rts. 219 and 6; Sinnemehoning, intersection of Rts. 872 and 120; Renovo Forestry Building, two miles north of Renovo on Rt. 120; S.G. Elliott State Park, one mile north of I-80 off Rt. 153 at Exit 18; Northcentral Office Building, two miles south of Jersey Shore on Rt. 44; at Penn Nursery on Rt. 322 near Potters Mills.

*Southcentral Division*—Southcentral Division Office, one mile west of Huntingdon on Rt. 22.

*Northeast Division*—PGC Storage Building two miles southwest of Tobyhanna, Rt. 423; PGC Storage Building, fifteen miles south of Hawley, Rt. 6 at Shohola Falls; Northeast Division Office, intersection of Rts. 415 and 118, Dallas; Monroeton Rod & Gun Club, just south of Monroeton off Rt. 220 along Twp. Road T-402 between Kellog and South Branch;

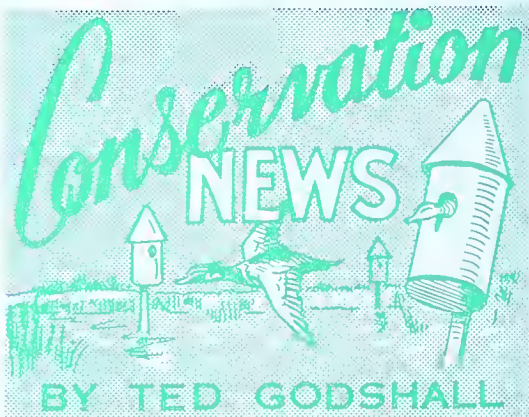
*Southeast Division*—Southeast Division Office, seven miles north of Reading, one mile off Rt. 222 on Lauer Road.



**DONALD MEANS** of Honey Brook with the first bear he ever shot at. One bullet did the job on his trophy which field-dressed at 382 lbs. Don's good luck came in the 1983 season.

## Cool It

Every season many successful bear hunters let their trophies spoil. Bears, even smaller ones, are especially well insulated, and if not ventilated adequately, the meat will quickly become tainted. Hunters should thoroughly field-dress bears—remove heart and lungs as well as entrails—then prop the cavity open to permit ample air flow. The carcass should be skinned as soon as possible. A Pennsylvania bear is a great trophy. Don't let one go to waste.





# E. J. Brooks Dies

E. J. Brooks of Lansdale, longtime Game Commission member, died August 26 after a lengthy battle with cancer. He had served as a Commissioner from April 1969, until his resignation in February of this year.

While a member of the Commission, he served as president of the body for three years, and was responsible for creation of the executive committee, serving as its chairman for many years. At the time of his retirement, he was chairman of the budget and nominating committees of the Commission.

The retired Commissioner, president of E. J. Brooks Company and a recognized industrial consultant in real estate, was honored on numerous occasions for his service to the Boy Scouts of America. He was the key individual in putting together the land package of 3200 acres for the Resica Falls Scout Reservation in the Poconos.

He also served on the board for the Girl Scouts of Philadelphia, served as a United Fund executive, was a member of the board of the Philadelphia National Bank, and was a member of the Montgomery County Prison Board.

Brooks received the Pennsylvania



E. J. Brooks

State Award given by the Philadelphia Federation of Sportsmen's Clubs for his most outstanding service to the sportsmen of Pennsylvania.

## ANF Maps for Deer Hunters

Allegheny National Forest personnel have produced four maps to help direct hunters to areas of especially high deer densities. The ANF is located in four counties—Warren, Forest, Elk and McKean—and a map is available for the section of forest in each county. Depicted are recent timber harvest areas and access roads. These roads will be kept open in the event of snow. Hunters can obtain a free map by writing to: ANF Deer Hunting Maps, Dept. G, P.O. Box 847, Warren, PA 16365, or by calling 814-723-5150. Be sure to specify which county you are interested in.

## Don't Load Firearms Before Shooting Time

Hunters going afield before daylight are urged not to load their guns prior to the legal shooting hour. Deer hunters often head out well before daylight so they reach their favorite hunting spots before dawn. Some load their firearms before starting. Hunters often trip on roots, rocks, etc., when traveling in the darkness, particularly through the woods. Sometimes, a gun accidentally discharges when the hunter trips or falls, and a serious accident can result.

## Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Doult, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00
<b>Working Together for Wildlife Collectibles</b>		
_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1983 ART PRINT "River Otters" .....	\$125.00
<b>Wildlife Management Areas</b>		
_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00
<b>Pennsylvania Bird and Mammal Charts</b>		
_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 by Ned Smith) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00
<b>SPORT Items</b>		
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00
<b>GAME NEWS</b>		
_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 5.00
<b>Waterfowl Management Stamps (Voluntary)</b>		
_____	1985 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

DO NOT SEND CASH

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



# A TREE FARM LEGACY

By Ken Olenderski

EVERY YEAR, members of the Pennsylvania Tree Farm Committee start down a long trail in search of the best tree farm in the state. With more than 1400 active tree farmers in the state enrolled in the national Tree Farm program, it is a trail which takes a full year of application reviews, reports, and on-the-ground visits by professional foresters to complete.

The search for Pennsylvania's 1985 Outstanding Tree Farm is now in full swing, but in 1984 it culminated when the Greene County farm of the Harold D. Burns family won top honors as "the best of the best." Located just two miles from Graysville, the Burns property is a fine example of how neglected marginal land can be improved through forest management.

Although Harold passed away recently, his great love of the outdoors is still very much alive in the hearts of his wife Helen and their five children. Their continuing efforts make the tree farm a truly outstanding example of forest management and a source of inspiration to others.

It all began in 1940 when Harold became owner of an abandoned, 125-acre farm which had been in the fam-

ily for five generations. As the sixth-generation owner, Harold had a tough decision to make about the fate of the property. The buildings were deteriorating and the untended fields were slowly reverting to trees and brush.

Most people would have considered the property a liability instead of an asset and promptly sold it. But Harold was different. He was convinced the old place still had potential.

From the beginning, his goal was to transform the property into a productive forest. The job wasn't going to be easy, especially after a survey revealed that only 35 acres supported fully stocked, manageable timber stands. The remaining 90 acres were a hodgepodge of open grassy areas intermingled with patches of brush and saplings.

After receiving guidance from the state's Bureau of Forestry, Harold rolled up his sleeves and went to work.

In 1951 and 1952, eight acres of steep hillsides were planted with 5,000 white pine seedlings to correct a serious erosion problem. Several years and 106,000 seedlings later, all of the farm's idle acreage had been planted with trees. The primary goal of this reforestation effort was timber production, but good

**THE HILLSIDE BEYOND** Harold Burns' tree farm sign was once abandoned eroding farmland. Today it supports a productive forest of hardwoods, pines and spruce.



## Taking Care of the Land

More than 1400 tree farmers in Pennsylvania know that being forest *managers* instead of forest *watchers* increases the satisfaction of owning woodlands. These landowners have personal reasons for managing their properties, but all are dedicated to changing idle woodlands into healthy, productive forests.

If you are a woodland owner who would like to find out more about the benefits of the Tree Farm Program and forest management, contact the Pennsylvania Tree Farm Committee, c/o the Pennsylvania Forestry Association, 410 East Main Street, Mechanicsburg, PA 17055.

wildlife habitat was also assured by planting a wide variety of species, including oaks, white ash, larch, alder, douglas fir and spruce.

By 1975, some of the oldest plantations were ready for timberstand improvement. This included thinning to promote faster growth; removal of low-value cull trees; and pruning white pines to encourage development of valuable high quality sawlogs. During the last nine years, 55 acres have been improved in this manner.

Two successful timber sales were conducted on the Burns tree farm. The first, in 1951, was a selective harvest of 40 mature, veneer-quality white and red oaks which netted a handsome price. Sixteen years later, the remaining trees in this 12-acre hardwood stand had matured and were clearcut. Again, the income from the sale was a welcome addition to the Burns family budget.

Wildlife inhabitants of the tree farm also have prospered as a result of this activity. In the vicinity of the clearcut, for example, there are more grouse than ever before, and white-tailed deer frequently seek refuge within its borders. Even foxes are seen prowling around the edges of this heavy cover in search of an easy meal.

The evergreen plantations have pro-

vided habitat diversity and improved conditions for wildlife, too. Spruce, in particular, is especially attractive to nesting songbirds because of its dense foliage. In the fall, red and gray squirrels invade the older plantations to feast on the seeds of ripening pine, fir and spruce cones.

## 1800 Mast-Bearing Trees

The most recent activity on the Burns tree farm has been the planting of 1800 Chinese chestnut, red oak, walnut and dogwood seedlings. This was done specifically to increase the number of mast-bearing trees in the area. For maximum results, these seedlings were planted in several small plots throughout the property. Someday, many years from now, they will make a valuable contribution to the wildlife food supply.

Planning for the future is an important part of tree farming, and expert advice is one of the key ingredients. From the very beginning, Harold Burns recognized this and worked closely with service foresters from the Bureau of Forestry. With their help, a written forest management plan was developed for the property in 1962. It was certified as an official tree farm in 1964. Public hunting has been permitted for many years through the Game Commission's Farm-Game program.

Recognition as Pennsylvania's most outstanding tree farm came as quite a surprise to the Burns family, but it is not the only prestigious forestry award they have received. In 1983, shortly after he passed away, Harold was honored posthumously as the recipient of the first Outstanding Forest Conservationist Award ever presented by the Greene County Conservation District. In accepting the award, his sons Bruce and Robert not only acknowledged their gratitude, but also reaffirmed the family's commitment to the goals established by their father many years ago.

Both awards are ample proof that, even though Mr. Burns is no longer with us, his legacy lives on in the well managed, productive woodlands of an old, abandoned farm in Greene County.



# Pete's Gun

**N**OVEMBER is a month only a hunter can love. October's landscape, touched with fire colors, has faded to smoldering hues. November always seems melancholy to me, but not unpleasantly so. November dresses in the sober muted shades of the ruffed grouse, and she sparks nostalgia.

Perhaps one reason November brings back memories is because of a gun I often carry then. It's an old-fashioned shotgun by today's standards, an unpopular gauge. The autoloading 16-gauge, a Remington Sportsman 48, isn't a collector's piece, and honestly wears the scars of its years. But it suits me. Compared with a blunderbuss 12-gauge I own, it's a pleasure to carry. The stock is just my size, swinging up smoothly to my shoulder, my cheek naturally finding the wood, the vent rib level before my eyes.

I knew I'd enjoy this gun, from the moment I picked it up. So when it came up for sale, I had to have it. And Pete's widow was glad to have the money. I soon found, though, that I'd bought more than polished walnut and cold metal. I'd bought a memory.

All the other guns I own are unsentimental pieces of coolly operating machinery. I purchased them brand new and any stories they have to tell are the ones we wrote together. But this 16-gauge is different. It carries the history of another person's hunts in the scratches on its satiny stock, its wood is dark where another's hands often held



**WHEN PETE'S GUN came up for sale, I had to have it. I soon found that I'd bought more than polished walnut and cold metal. I'd bought a memory.**

it, and silver spots show where the years have worn through the blueing. Since the day I purchased it, the gun and I have made some history ourselves. But I know it can never truly be mine. I will always think of it as "Pete's gun."

Pete and I weren't great hunting pals, so the gun doesn't conjure up any tear-jerking "glorious days afield." Pete wasn't even a close relative. He was, instead, a good neighbor, a fine friend. And now that he's gone, whenever I pick up his shotgun and walk into the grouse woods, I seem to see him again, his smile and his eyes. It feels then that he's not gone so far away.

Pete wasn't his real name, only a nickname that he preferred to what he'd been given. He and his wife and teenage daughters lived next door to the first home my husband and I owned. It was an age, and I was at an age, when the first time I saw the small man, dressed in his workday khakies and ballcap, that I mentally catalogued him as "redneck." I'm embarrassed now by that judgment, because in the years that followed I

## Another View...

by Linda Steiner

found we shared so much in common and that the man was an artist, a craftsman, in his own quiet way.

Pete worked hard at a commonplace job to support his family, but in his spare time he would fashion muzzleloaders. This was in the days before the popular kits. He himself worked up the stocks from blanks, browned the barrels, cut intricate German silver inlays. He mastered everything he tried—making knives and game calls, working in wood, handtooling leather, chipping flint arrowheads. Pete was interested in so much, from Indian lore and fossils to wild plants and animals. He taught me some of his crafts, and when I'd show him my own faulty attempts at perfection, he'd just laugh quietly and shake his head, an action I came to associate with him.

I think Pete and I got along so well because we helped fill a gap in each other's life. I was young and married, just moved away from my mom and dad. Pete was the same age as my father and I, I later learned, was the same age, and even bore a resemblance to, his oldest daughter, who lived a thousand miles away with her husband.

### **Last Hunt**

Several years after I met Pete, his health began to fail. That was why I was never able to do much hunting with him. My husband Bob and I took Pete on what turned out to be his last hunt. I can't say it was a red-letter day, but perhaps what happened made it a better, more human, memory, than having filled our game bags.

We'd heard that a nearby Game Lands had been stocked with pheasants, and decided this would be a good opportunity for Pete to take out his 16-gauge. It had been a long time since he'd done any shooting. With emphysema and such, Pete couldn't walk far, and we hoped to bounce some birds close to the car.

It wasn't that simple, and as we walked I kept glancing at Pete, to see how he was faring. Suddenly Bob backed away from a brushpile and called, "There's a bird in here. You two get set and I'll kick it out for you." What more could we ask? We readied our guns and gave the go-ahead.

But instead of a final hurrah, what followed was a funny sort of fizzle. Bob stomped the bush and the bird busted out, lumbering into the air. Easy shot! Pete swung and fired, and I did too. We missed. Both of us. Six shots. I stood with my gun empty, my mouth hanging open, all sorts of unpleasant sayings welling up in my mind. But Pete just shook his head and laughed. Then I laughed too.

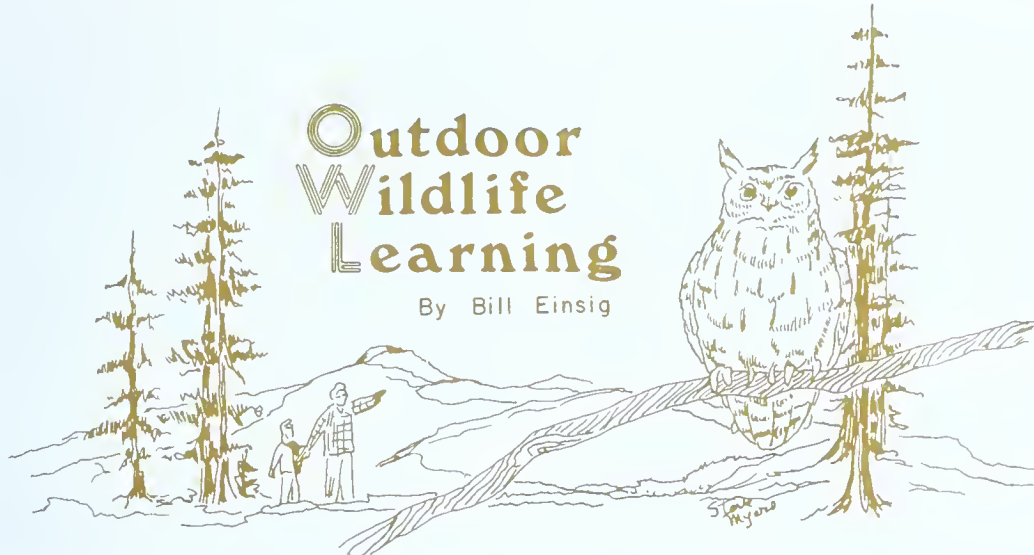
Winter came not long after that November day, and Pete never saw the spring. One day, it seemed, he was showing me a muzzleloader he had just completed, and the next I was rushing his wife to his side at the hospital, expecting the worst. I felt awkward, but comforted her as best I could, because her own daughters, now grown, were not at home when it happened. I spent a lot of time with the family, through the funeral and after, feeling his death as more than that of a friend, yet with less hurt than that of a relative. Pete taught me here, as well. It was a way of preparing me for what I probably would eventually have to face in my own family.

Today, I am the owner, or rather the custodian, of Pete's gun. So many changes have occurred. His wife has remarried and left the area and the daughters' homes are all far from Pennsylvania. I have moved across the state. Another couple now lives in Pete's house, nice folks too, yet I know they'll always be unaware of the special person who lived there. I sometimes think about this, concerned about the old lives disappearing, being forgotten. But then I pick up Pete's gun, and it all comes back.



# Outdoor Wildlife Learning

By Bill Einsig



**E**LEMENTARY teachers usually have a unit dealing with water during some part of the year. Such units try to stress the importance of water to all plants and animals, and deal with the water cycle in some form. Too often, though, our own part of the water cycle is ignored.

As living creatures also dependent upon a consistent water supply, we have developed our own cultural water cycle. We take water from some source, treat it in some way, and transport it to where we need it. Eventually, the water we use finds its way back to the natural cycle.

Understanding this cultural cycle is as important as understanding the natural one. In recent years, Pennsylvanians have experienced droughts that caused interruptions and placed limitations on the water supply systems we've created. Youngsters should understand how their water supply is really only an extension of the global water cycle that we take for granted.

To help meet this need, the American Water Works Association (AWWA) has produced a set of activity-based materials for students in grades 1 through 9. The set consists of three teacher's guides and a common comic book. The comic book is available in classroom quantities with the appropriate teacher's guide—primary, intermediate or junior high levels.

The guides have a format busy classroom teachers will appreciate. Student work pages can be easily reproduced with a copier or spirit masters. Concise directions and background information for the teacher are given for each lesson and, because most lessons involve paper-and-pencil work only, little preparation is needed to use the activities.

Each guide does contain, however, an appendix with supplemental activities that require more setup time. Here, directions are given for building a simple water filter, a terrarium, and a water mobile for the classroom. These could also be used as individual student projects.

The quality of the lessons varies somewhat from one grade level to another. The elementary activities are better than those designed for junior high

## Activities: Primary

There are eight lessons in the teacher's guide intended for grades 1, 2 and 3. Most of these involve drawing, coloring and creating—all valuable activities in this age range.

The primary lessons focus on the need of all creatures for water and on cultural uses of water with a strong emphasis on conservation. One activity directs the teacher to collect water overnight from a dripping classroom faucet. The next morning, students measure the water by the cupful to see how much could be lost.



Bill Einsig recently received one of the ten Honor Awards given in 1985 by the Soil Conservation Society of America. Awards are given for significant contributions in the fields of land and water conservation. Bill specifically was honored in recognition of his dedicated and innovative approach to environmental education. In addition to writing the OWL column and teaching at the West Shore School District in Lemoyne, Bill, following his beliefs that environmental education should not be limited to schools but extended to the community and state, also assisted with the development of the Whitetail Environmental Center, where he is currently the temporary director, and is actively involved with teacher education programs, including Project Learning Tree and Project Wild.

each pipeline for ready identification.

Many youngsters think of the faucet as the magical source of all water. The idea that their water comes from outside the house and circulates through it might be a novel concept.

The lessons in this guide make it the best of the three books. The activities involve students in interesting ways that will fit well with existing units of study in most schools.

## Activities: Advanced

There are ten lessons in the advanced level teacher's guide written for the junior high grades. Good information is included in most of these lessons but they lack the zip of the elementary materials.

The first three lessons are little more than fact sheets that ask students to do no more than read the information. The remaining seven activities hang together in a loose scenario that puts the students into a drought-stricken neighborhood where they must spend most of their day carrying water from a distant source. They design water carriers, look at the economics of buying bottled water and, after someone discovers a new source of water in the neighborhood, they draw plans for an unusual water tower that "people will notice as they drive by."

In general, the scenario is weak, unrealistic, and a bit juvenile for junior high students. Intermediate teachers, though, should look at this guide. Some portions of it could be modified into more challenging lessons.

## The Comic Book

Each teacher's guide is accompanied by classroom sets of a colorful comic book "The Story of Drinking Water." Teamed with activities from the teacher's guide, it can be an important part of a water unit at the intermediate grade level. It is, however, probably less useful for older students or for younger students just learning to read.

The comic is more a source of information than a story. There is no story line, no drama to catch the students' interest.

The comic book and teacher's guides are free. To order, contact Tom Reese, Keystone Water Company, 800 West Hershey Park Drive, Hershey, PA 17033. You can also use a toll-free number: 1-800-822-2145.

Another lesson asks youngsters to create a new decorative design for fire hydrants. Of course, during the lesson students learn why hydrants are necessary and why tampering with them can be troublesome, if not dangerous.

The author of these materials, Rosalie Bock, obviously has some experience working with elementary youngsters. At one point she seems to prove her sympathy for the elementary teacher when she gives directions to "Duplicate student page four and pass out." Many teachers across the country, in the midst of a hectic day, would like to do just that!

## Activities: Intermediate

Lessons for students in grades 4, 5, and 6 are usually most fun. Reading and math abilities are well enough developed at this age to deal with more creative lessons. The fourteen activities in this guide are all fun, practical, and appropriate to most school curricula. That means many teachers will use them.

"Household Plumbing" is a unique concept that is so simple, so useful, that I wonder why I haven't seen it before. Students are given an illustration of a house cross-section showing the plumbing system, including water lines, drains and vents. They then trace the pipes throughout the maze-like house and color code



## Chesapeake Bay Symposium

The crisis in the Chesapeake Bay will be the topic of a symposium for educators at Shippensburg University, January 18, 1986. The one-day program will present an overview of the problems facing the Bay and what needs to be done to restore the productivity of the estuary.

During the morning session a panel of experts will discuss various phases of cleaning up the Bay. Afternoon workshops will focus on educational materials and innovative lessons designed to make students aware of the problem. The

cleanup will be a long-term effort, and today's students will be taking active roles in the decades ahead to bring the Bay back.

There will be workshops for elementary and high school teachers. Most activities will require only basic equipment and supplies typically found in most schools. A few, however, describe more extensive monitoring studies that students can conduct over a period of time.

The symposium is being organized by the Pennsylvania Alliance for Environmental Education. Contact PAEE Regional Director Fred Bubbs, 267 Recreation Building, University Park, PA 16802.

### ***GAMEcooking Tips***

Thanksgiving is more than a harvest festival. For many families it is homecoming time, a time when everyone gets together for the simple pleasures of home and hearth. Thanksgiving is one of our family's favorite holidays. The day before, my dear mother-in-law always asks me, "Why do you fuss so?" I always say, "I'm building memories. Memories bind families together. Memories turn into traditions. . . ." I'd like to share with you one of our treasured traditions, Harvest Soup in a Pumpkin. It's festive, gorgeous, dramatic. . . .

#### **Thanksgiving Harvest Soup**

- |   |   |
|---|---|
| 1 squirrel                                | 1 can evaporated milk                       |
| 1/2 pound hot venison sausage,<br>chopped | 3 bay leaves                                |
| 1/2 pound smoked sausage,<br>chopped      | 1 teaspoon seafood<br>seasoning             |
| 2 medium onions, chopped                  | 1 teaspoon oregano                          |
| 4 medium potatoes, diced                  | 1 teaspoon black pepper                     |
| 1 package frozen mixed<br>vegetables      | 1/2 teaspoon salt                           |
| 2 16-oz. cans creamed corn                | 1/2 teaspoon paprika                        |
|   | 1 medium-size pumpkin<br>to use as a tureen |

Clean, skin, and cut squirrel into pieces. Cover with two quarts of water and 1/4 cup salt. Allow to soak several hours. Drain, rinse, and pat dry. Cover with fresh water in pot and cook over medium heat one-half to three-quarters of an hour. Remove meat and allow to cool before picking meat from bones and cutting into small pieces. Add sausages and onion to a pot with two more quarts of water and bring to a boil. Lower heat and boil slowly for 15 minutes. Add potatoes and mixed vegetables, and boil five minutes longer. Add remaining ingredients, including squirrel meat. Lower heat to simmer, and cook one hour to allow flavors to mix. Stir frequently to prevent sticking.

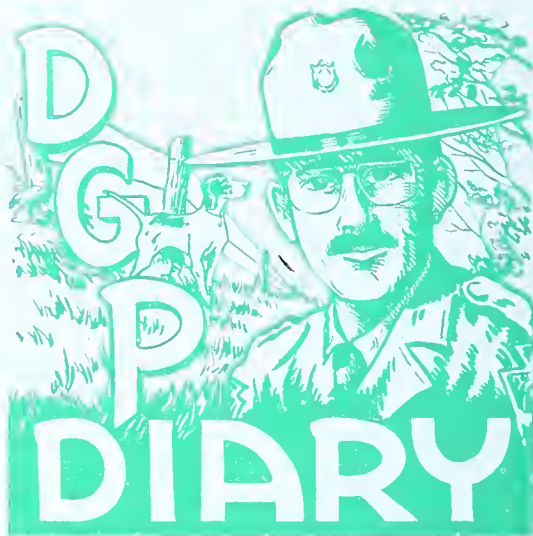
For pumpkin tureen, heat oven to 300°. Wash pumpkin, and cut top off as for a jack-o-lantern. Remove seeds, put pumpkin on cookie sheet, and bake 20 to 30 minutes. You want the pumpkin heated, but not cooked through. It must stay firm enough to serve as a tureen.

Bring soup close to boiling, ladle into pumpkin, and serve. As you ladle individual bowls, scoop some softened, cooked pumpkin from the sides for garnish.

Served with a big chef's salad and warmed buttered bread, this is a meal to remember.

—FROM WILD GAME COOKERY  
BY CAROL VANCE WARY

**N**OVEMBER brings three major events in the life of a game protector: the opening of small game season, bear season, and the beginning of deer season. The work load has been escalating ever since the opening of archery season the previous month, with no relief in sight until sometime after antlerless deer season near the first of the year. Taken on a year-round basis, I budget only about one-fourth of my time for the classic law enforcement functions of patrol, investigation, and court prosecution, the remaining three-fourths of my efforts being spent on other Game Commission activities. However, during hunting season those ratios probably reverse, with 75 percent more of my time prioritized for law enforcement and most other programs temporarily de-emphasized.



By Joe Carlos

District Game Protector  
Cameron County

*November 3*—It's the opening day of small game season, and Deputy Bill Smith is working with me. Aside from apprehending a man who is hunting 45 minutes prior to the opening hour, the behavior of area hunters is good and we are pleased to see them bagging a fair number of stocked ringnecks. Were it not for the game farms, hunters in this area would be denied this recreational experience. The sportsmen seem genuinely happy with the high quality of the birds and thankful for the products of the game farm.

*November 4*—Game Protectors Harold Harshbarger, Leo Milford, and I conduct a dinner meeting for Elk and Cameron county deputies and their wives. North-central Region Director Willis Sneath brings the group up to date on recent changes in the Game Law and deputy policy, and then Rawley Cogan presents his elk slide program.

*November 5*—We have caught a bear in Bernard Bauer's cornfield on the Oliver Gross farm near Clear Creek. As Commission policy prohibits the use of drugs on bears a month before season, I am unable to tag and process the bruin as would be routine procedure otherwise. As it is, I give him a long ride to the Quehanna Wild Area and release him.

In the evening, Rawley Cogan and I are guests at a banquet of the Sinnemahoning Lions Club. Rawley puts on his elk program which is, as always, well received.

*November 6*—I investigate a minor hunting accident this morning. In the three years I have been assigned to Cameron County, we have had only two accidents. Both have been cases of young men shooting themselves accidentally in the foot with 22 rifles while squirrel hunting. I mention this to the victim as we fill out the paperwork, and tell him of several less pleasant accidents I have encountered elsewhere.

*November 7*—Our second release of pheasants is scheduled for today. As the season is in progress, this stocking has to be done by myself and my deputies without the help of the sportsmen's clubs. We spend most of the day at it. I observe the quality of the birds with a keen eye on their plumage, ability to fly, general heartiness, and wildness characteristics. These are some of the areas of improvement that Superintendent Banks Smith spoke about when he gave Deputy Schatz and me a tour of the Loyalsock Game Farm in June. Judging by these birds, I would have to say they are well on the way to accomplishing their goals. Having worked at the game farms for six years, handling and observing literally hundreds of thousands of ringnecks, I have to admit these are some of the finest game birds I have ever seen.

*November 10*—On my way to pick up Deputy Smith for routine patrol, I receive a



message via County Control radio to go to the George B. Stevenson Dam and assist their personnel with a deer trapped in the spillway. This happens about once a year. Although there is no water in the spillway, a deer wandering into it often finds it impossible to get enough traction to run up the steeply sloped walls and escape. Furthermore, after repeated attempts the rough cement can act as an abrasive, literally wearing the hooves down to the point of bleeding. All this can weaken the animal, often inducing shock and eventual death. We are lucky this time, and the spike buck is rescued in good health within a half-hour.

*November 12*—I investigate a case of bear baiting today, and attend a meeting of the Bucktail Search & Rescue Team in the evening. All my deputies and I are members of the team and make it a practice to drop whatever we are doing when someone is reported lost. With two-way radios, we can be invaluable in the containment phase of the search. We make plans for the first day of bear season, as invariably someone becomes lost then.

*November 13*—County Agent Rod Keniston and I have as our guest today Jack Payne, wildlife extension specialist from Penn State. Jack speaks about rabies at a luncheon of the Emporium Rotary Club, and then he, Rod, and I do a live call-in radio program on the same topic at WLEM, hosted by Assistant News Editor Lois Braden. Jack is extremely knowledgeable on the subject and his comments and advice are highly useful to the many listeners who are concerned about this disease.

*November 15*—I meet State Troopers Glen Fiebig and Jim Kockler near the Cameron County land fill to investigate our second hunting accident of the year. A 72-year-old man has been shot in the leg while turkey hunting. We learn that an ambulance picked him up just before we got there. Trooper Kockler follows to the St. Marys Hospital to interview him, while Trooper Fiebig and I secure the scene and use a metal detector to search the area for cartridge cases. We find three 22 Magnum empties which will later help us piece this puzzle together.

*November 16*—The morning is spent in

a hearing before District Justice Alvin Brown, the afternoon with Trooper Ron Luckenbill and Deputy Bill Smith investigating a case involving individuals who have taken a fox out of someone else's trap. The individuals are apprehended and arrangements are made to pay the \$200 fine.

*November 19*—The first day of bear season, and my investigations of reported bear baiting in the vicinity of Mix Run pay off as Deputy Brehm radios me to advise he has been watching the suspect hunting for several hours in a treestand directly over the bait. He is apprehended and cited for \$400.

Three hunters are reported lost in the county, and we assist the Search Team well into the night. All are found.

*November 20*—Our luck holds true to form on the second day of bear season as Danny Brehm and I apprehend two men with a freshly shot doe in their vehicle. Citations for \$400 are written. We stop at the bear check station and learn that some of the so-called tame bears we have had trouble with have finally been harvested. We breathe a sigh of relief as we leave, but are still apprehensive about next year as a couple of the worst offenders have escaped. In reality, the blame doesn't lie with the bears so much as with those humans who have repeatedly ignored our advice to stop the potentially hazardous activity of feeding bears.

*November 24*—The deputies and I are on night patrol. Shortly after apprehending a couple of late spotters at 3 a.m., Deputy Brehm and I drive by a camp and observe some suspicious activity. I crawl back through a field and observe a deer being skinned out behind the camp. We leave the area quietly.

*November 25*—I receive a call about a road-injured deer on the First Fork, right across from the camp we were watching the previous night. I arrive in a fully marked state vehicle, dispatch the animal, deer on my rack. All this time people from the camp in question are outside in the yard, observing my actions.

*November 26*—It is 4 a.m. on the opening day of buck season, and exactly 24 hours from the time we watched the

campers skinning out the deer when Trooper Sam Breniman, Deputy Schatz, and I arrive at their door. The meat is produced, along with a story that the deer was a roadkill. They have discarded the hide and Deputy Schatz escorts one of them in an attempt to recover this valuable piece of evidence. They find the hide, the condition of which clearly proves their story. Since they had ample opportunity to obtain a permit from me the previous day and made no effort to do so, they all pitch in to pay the \$100 fine.

The rest of the day is spent checking some very nice bucks and making apprehensions for the usual untagged deer and driving-closed-roads violations. The high quality of the deer this year comes as no surprise to those of us who are students of deer management. During the last decade or so we have lowered the overwintering deer population in Cameron County from approximately 30 deer per square mile to a level which our range can optimally support, about 17.

In addition to eliminating most of the winter mortality, this has resulted in a better fed and healthier herd, as evidenced by heavier deer and bucks with better racks. I have noticed the improvement just in the few years that I have been here. When I was first assigned to Cameron County I arrived in the spring, just as the snow was melting on some of the back roads which had been impassible all winter. I was often the first person to travel these remote areas and frequently had to get out to pull the carcasses of starved deer off the road in order to get through. In the fall, the average rack would be a set of spikes, many of which weren't even the legal 3 inches. As the numbers of deer have gone down, the quality has gone up.

Strangely enough, in spite of the fact that we are attempting to carry a herd of only 6700 whitetails through the winter instead of the almost 12,000 of a few years back, when the deer management system was still being refined, this hasn't significantly affected the hunter's chance of taking a buck. For example, in the decade of the 1960s the average annual reported buck kill in Cameron County was 882. In the 1970s it was 889, and so far in the 1980s it has been 830, only a scant 6% decline! We are able to do this because now the deer are being harvested by the

hunter's gun and utilized, whereas before a great many of them died lingering deaths of starvation, only to rot or become food for bears when they came out of hibernation in the spring. It is my theory that lack of these winter killed deer in recent years is partly accountable for the increased number of bear complaints in early spring before other foods are available.

It is also interesting to note the trend in allocation of antlerless deer licenses during the same time period. During the 1960s the average number of permits for Cameron County ran about 3708, and during the 1970s it was 3710. So far during the 1980s it has averaged 5450, a substantial 47% increase. We have thus been affording this recreational experience to a far greater number of sportsmen without sacrificing the resource.

One problem is that many city hunters who come to the northcentral counties don't see the numbers of animals they once did. There are parts of Cameron County where one might have seen 20 deer a decade ago that are home to only 10 today. That can be a turn-off. Every hunter likes to see a lot of deer. It brings a surge of adrenaline to spot a herd of deer every few hours. Even if he doesn't get a shot, he goes back to camp to tell about a rewarding experience. But now that the population has been thinned down to better match available habitat, the chances of bagging a buck are still good and the quality of the deer is better. Nevertheless, because the hunter may not see as many deer as in years past, his is dissatisfied with our management program.

The difference is, in the past the hunter went back to the city after the season, and only a handful of us remained to view the heartrendering sight of deer starving because of overpopulation. Critics of the Game Commission are correct in pointing out that a cut in antlerless licenses would bring the pre-hunt population back up to its former levels. What they are overlooking is the fact that starvation would escalate even faster, and the number of deer harvested would not significantly increase. Artificial winter feeding programs have never been shown to be a solution either. The long and short of it is that we can have only as many deer as the habitat will support.



IT WAS twelve, thirteen years ago. We were crouched at the edge of the timber on Dodd's Peak, looking at two brown specks that were deer bedded in the Wyoming high-country grass. I was with my old friend Norman Dodd, for whom the Forest Service had named the mountain, since his was the closest cabin to it. It wasn't hunting season, but Norman was showing me how to approach game; he had been a guide back in the '30s, and I was learning a lot from him. We sat in the pine-scented shade and looked down on the sunny meadow, glassing the deer and listening to jays calling and squirrels chattering behind us in the lodgepole pines.

"Norman," I said, "I need to get a rifle—a gun for mule deer and elk, and for whitetails back in Pennsylvania. What caliber would you recommend?"

"A 270," he said straightaway. "Those deer down there, I'd call them 375, 400 yards. You could take one with a 270. I've seen hunters use 270s on elk, long shots in the open and close shots in the timber. A 270 puts game down good."

### First Job

At the time, I hadn't money enough for a rifle, at least not a good one. A few years later I finished college and landed my first job—staff writer for the *GAME NEWS*—and set about buying some good guns. I got a shotgun, a little Ithaca side-by-side; and a Savage-Anschutz 22. Then I started the perplexing business of looking for the right gun to hunt big game. I think I've found it today, some ten years later. Maybe my experiences will help other hunters searching for their own big game rifle.

The cartridge Norman recommended, the 270, is one of several calibers versatile enough to take most big game in North America. Other so-called all-around cartridges include the 280 Remington and 284 Winchester (both considered obsolete, as no factory-made rifles are chambered for



them today); the 7mm Mauser, or 7x57; the 7mm Remington Express (essentially the old 280); the 7mm Remington Magnum; several magnum 30 calibers; and the venerable 30-06, undoubtedly the most popular of the bunch.

The cases of these cartridges hold enough gunpowder to push a fairly large slug—130 or 150 grains or even larger—out of the barrel at around 3000 feet per second, and to keep it traveling over long distances with ample energy and at a high rate of speed. This makes the bullet a good killing missile at ranges from point blank up to around 400 yards for animals like deer, black bear, pronghorns, caribou, and mountain sheep and goats. For grizzly bears, brown bears, elk and moose, a hunter is better off with the more powerful of the all-around calibers: the 7mm Magnum and 300 Winchester Magnum, for instance, and, of course, cartridges even larger. But the 270 and 30-06 have killed their share of these big, tough animals, too.

The way I saw things when I started looking for my gun (and the way I still see them now), the average big game hunter needs only one rifle—in fact, is better off with a single big game outfit than with multiples of the same. There are several reasons. First, he ties up money in only one gun and one type of ammunition, letting him use his sav-

ings for hunting expeditions, more memorable and rewarding, or so it seems to me, than sitting around looking at any number of rifles in a cabinet. Second, he becomes familiar with his gun, comfortable with it. He practices with it and it alone, until his hands develop a feel for its contours, its bolt and safety and trigger, so that the firearm becomes almost an extension of his body. When he spots his quarry, the rifle leaps—seemingly by itself—to the proper place on his shoulder, its sights on the target. The hunter shoots instinctively and with confidence. If he has to take more than one shot, he works the action smoothly and efficiently, never taking his eyes—or his mind—off the game, be it whitetail or elk or moose.

### Wanted a Bolt Action

Early on, I decided I wanted a bolt action gun. I've always been partial to bolt actions; they feel correct in my hands. Also, I learned that a bolt action rifle is inherently more accurate than a lever or a pump gun. The bolt action operates more reliably in rain, snow, or cold, and on tarnished cartridges. True, the bolt action does not deliver a second shot quite as fast as a

lever gun (although I've seen hunters who were marvelously fast with a bolt), but in hunting this doesn't often matter: the first shot is usually the one that kills.

Norman Dodd's advice stuck with me. I was leaning toward a 270, considering having one custom-made by a gunsmith, since I was not overly impressed with most of the factory-made rifles of 1975. They seemed stiff and cold; the wood of their stocks lacked figure, and often had impressed rather than cut checkering. Certainly these guns were efficient and accurate, but not the kind of firearms that made me want to pick them up, handle them, make them become that hoped-for extension of the body.

Then one day a friend offered me a good quality barrel in 284 Winchester caliber. Since the 284 is ballistically similar to the 270, I went with it.

I bought a re-worked Mauser action, a safe, sturdy bolt action designed just before the turn of the century and used in German military rifles in both world wars. I ordered a semi-inletted walnut stock and had a gunsmith fit the barreled action to it. I had the metal blued and the wood finished. The stock I'd chosen was a





Mannlicher, a German style in which the fore-end extends all the way to the muzzle. I added a scope, a Leupold 1-4x variable. It made a handsome combination.

But the gun had problems. The Mauser action, I soon found out, was not originally intended for use with a telescopic sight. The original Mauser safety could not be used. Even the replacement, when on safe, stuck up almost vertically. This put it too close to the scope tube, making it difficult to operate. A couple of years back, that arrangement cost me a trophy. I had heard the deer coming through a patch of mountain laurel; he stepped out of the thicket and showed the long white tines of an 8-point rack, heavy and wide. It was cold, and I was wearing gloves. When I went to thumb the safety off, I got it only partway down. As a result, I never got a good shot at the deer. I could never quite forgive the rifle for the missed opportunity.

The gun's second problem was that it wasn't accurate enough. While a Mannlicher stock is pleasing to the eye, a little warpage on that long fore-end can put varying pressure on the barrel, pressure that will send shots awry. The best 3-shot group I could coax out of the gun was 3 inches at 100 yards. While that kind of accuracy is fine for woods-country whitetails, it is inadequate for mule deer bedded down at 400; out there, group diameter becomes a full foot, enough to cause a miss or, worse, a nonfatal wound.

### Seven One-Shot Kills

I didn't give up on the 284 right away. I liked the cartridge, having made seven one-shot kills with it on Pennsylvania deer. By then I was living in Centre County. I found a gunsmith, Jeff Swabb of RD 1, Centre Hall, who also became my friend. Together we worked on the gun.

We got out the reloading dies and tried different bullets and different powder loads, with limited success. Jeff relieved the barrel channel, removing wood to eliminate the possibil-

## KILLING EAGLES IS UNLAWFUL!

**Mature Bald Eagle**



**Immature Bald Eagle**



**Up To**  
**\$4,000 REWARD**

for information  
leading to the CONVICTION of individuals who MOLEST,  
INJURE, or KILL BALD or GOLDEN EAGLES.

Report violations to your LOCAL GAME PROTECTOR.

PLACED IN 1981 BY

ity of changing pressures on the metal. When accuracy did not improve, he tried glass-bedding the barrel, to seat it uniformly in the stock. No luck there, either. I considered lopping off the Mannlicher fore-end, but there was no guarantee that would help, and it would still leave me with a gun whose safety I sometimes found awkward. I could have asked Jeff to install a new safety, but by then I'd lost confidence in the gun and didn't want to put the money into it.

An idea began to take shape.

My old friend Norman Dodd was gone by now, but I kept hearing his words: "A 270." And for as long as I could remember, gunwriter Jack O'Connor had said nearly the same thing. "For all game in open and semi-open country the 270 is a fine and satisfactory caliber," O'Connor wrote in *The Rifle Book*. "Even for deer in timber the 270 is also satisfactory for the man who likes a bolt action."

Jeff and I both cut our eyeteeth reading O'Connor columns and articles in *Outdoor Life*, where for many years he was Shooting Editor. At some point we started referring to the old master as "Uncle Jack," which I somehow think he wouldn't mind, were he still living today.

Not only did O'Connor tout the 270, he also had a favorite rifle for it: the Winchester Model 70. Not the Model 70 you can walk in and buy off the rack in a sporting goods store now, but the one made before 1964. The pre-64 Model 70, as it is known, had a smooth-working bolt action; positive controlled feeding and extraction of cartridges; a strong receiver (the receiver forms the bulk of the action, the metal that houses bolt and trigger); an excellent adjustable trigger; and a three-position safety that works horizontally, so as not to interfere with a scope.

Winchester first marketed the Model 70 in 1936. It soon built a reputation for accuracy and dependability. It was a beautiful gun. The metal had graceful lines that seemed to flow out of the walnut stock. The wood gener-

ally had some figure, and it received a good finish and hand-cut checkering. Many authorities consider the pre-64 Model 70 the finest factory-made American rifle, and its action forms the basis of a high percentage of the best custom rifles being built today.

One evening I walked into Jeff's gunsmithing shop. "I'm selling my Mauser," I told him. "I'm going to get a 270." He nodded. "Not just any 270, either. A pre-64 Model 70."

Jeff grinned. "That'll be expensive, but you won't find a better gun."

A month later I sold my 284. The fellow who bought it got a good deer rifle at a reasonable price. The money went into the bank, and the search went into gear. A pre-64 Winchester Model 70, caliber 270. An all-around gun. Uncle Jack's rifle. Next month, you'll learn what I found.

**AFTER A SEVEN-YEAR** lapse, a PGC deputy game protector revolver match was held in August and is expected to be an annual event. Forty-six districts were represented, with 116 individuals, including 16 four-man teams, shooting. The Daytime Survival Course was fired. Deputy Bob Dietz, Pottstown, was high individual with a score of 484. The District 6-36-3 team, S. Hess, C. Shaffer, R. Shaffer and C. Trippe, was tops with 1810.



**Bob Dietz**  
**High Individual**





# BOW HUNTING COVERUP

By Keith C. Schuyler

Photos from the Author

**T**HERE ARE two times in the bow hunting experience when a hunter is likely to shake so badly it will affect his ability to shoot accurately, regardless of his expertise with the bow. One is when buck fever sets in at the moment of truth; the other manifests itself when body temperature is so reduced that the least movement causes uncontrollable shivering.

"His," here, is intended to cover these involuntary manifestations in both sexes, for the girls are a growing part of the bow hunting scene.

Nothing here will suggest ways to overcome that physical aberration occasioned by the attempt to bag a creature the size of the average deer — whether the animal is male or female. Buck fever is a subject that has stumped many writers as well as the medical community. Attempts to solve this one are relegated to the limited probabilities of theory.

On the other hand, prevention of shivering would seem to settle into the obvious need to keep the body warm enough to prevent it. For gun hunters, it is mostly a matter of wearing sufficient clothing to ward off the effects of low temperatures. But with the bow hunter, it isn't all that simple. Not only must clothing be warm enough, it must be compact enough to permit a clean release of the arrow.

For those who opt to carry the bow during the upcoming gunning season, or may still be trying to fill their deer tags after Christmas, low temperatures can be expected. In the regular bow season of October, however, the thermometer can bounce all over the place. Further, early morning and late afternoon temperatures can vary substantially from those during the major



**RON D'ALONZO** is well dressed for any temperature contingency he's likely to encounter in Pennsylvania's archery season. Such preparation takes thought.

part of the day. Dressing to meet all temperature contingencies each day can be even more of a problem. It can, and sometimes does, snow in October.

Regardless of apparel planned, one factor is paramount. No matter how much pre-season practice or tours of the tournaments one has had, additional practice in hunting clothes is most advisable. A heavy jacket with

protruding bulges can foul up an otherwise perfect release.

If you plan to take a ground or tree-stand for a few hours or all day, there are other considerations. Unless proper dress is planned, and you consider how much you will walk and where you plan your hunt, there is a tendency to overdress. It is easy to think in terms of early morning temperatures, and then pay for such preparation for much of an all-day hunt.

### Ice Water

For example, you may be perfectly comfortable walking to a stand, but the perspiration collected on the way can cool you down in a hurry once you become immobile. If you erect a tree-stand, the extra energy required to get both you and the stand in position can produce additional sweat that will soon turn to ice water. This is especially true when you are in one of the high units exposed to all the elements with not even a tree trunk to hide behind unless the wind works to your favor.

**EACH HUNTER HERE has chosen his clothing to suit himself, basing his selection on past experience.**

The afternoon stand, if you are still hunting or driving during the day, can be even colder due to perspiration picked up during the warmer hours.

One answer to all of this is to pace yourself so that you don't work up a sweat before the actual hunt begins. Or, during the day, you can shed enough clothing to leave you comfortable without overheating. Of course, there is the business of wearing the jacket in which you practiced so faithfully for the big moment.

A way to lessen this problem is to dress in layers of light garments so that removing one or more won't make all that much difference. Most essential is that the outer garment be of close-knit material that will act as a wind-breaker. It is better to be a bit on the cool side in the earliest hours than risk bathing your body in perspiration that will cause problems later.

Large amounts of body heat are dissipated from the head. Consequently, a warm hat is necessary. However, too heavy headgear can cause you to perspire if you are exercising heavily as





## STRAIGHT FROM THE BOWSTRING

when driving deer. How many times have you heard hunters volunteer to continue driving simply because it was too cold for them to stand around?

There are modern fabrics, compact and warm, that you might investigate. They are expensive compared to conventional garments, but may well be worth the cost. Personally, keeping warm has rarely been a serious problem. By following the suggestions presented here, I've seldom had problems with the cold. Sometimes I suffer a little in the early hours for the sake of comfort during the rest of the day, but I seldom get the shivers.

On the rare occasion that I get caught short and do start to shiver, I encourage it. After all, shivering is nature's method of improving your circulation and restoring some warmth to the chilled body. In fact, you can supplement this natural phenomenon by physically inducing an artificial shiver. Try it right now. You can do it where you are sitting. Note that it isn't necessary to move out of position—a real plus when you are trying to remain still to avoid detection by your quarry. If you feel you are about to shiver, go nature one better and get a good one started on your own; the involuntary and uncontrollable one may never develop.

Even though the body is relatively warm, your hands and feet can give you frigid fits.

Although footwear should be loose enough that you can wear wool socks, trying to keep the feet too warm can work in reverse. My personal choice is for leather because it breathes better than rubber and is less apt to cause undue perspiration. For most days, heavy cotton socks are sufficient for me. If the weather calls for wool, I slip summer socks over it. They help retain

heat and make it easier to get my foot-gear on and off. But, if your footwear is too snug, two pairs of socks will retard circulation and cause cold feet when the rest of you is relatively comfortable.

When it comes to the hands, the primary concern is keeping the string fingers warm and flexible. You can use mitts which fasten to the belt and require little movement to bring the hand into shooting position. Or a hand warmer that operates on lighter fluid can be carried in a strategic pocket. Some gloves and mittens with leather finger protectors are handy, especially if you are on the move, but plenty of practice with them beforehand is in order.

The bow hand is not so critical, but whatever covering is worn on it must be pliable enough that the bow can be held comfortably and naturally. It is best, of course, to shoot without any unnatural covering on either hand if they can be kept warm enough.

It is not always easy, but to play it cool when bow hunting, it is best to be warm. And comfortable.

**BELT MITT** provides warmth for the hand which must release the arrow. It is no bother when not needed, yet is conveniently placed for warmth when inactive.





**GUNSMITH JIM PEIGHTAL and Don Lewis examine an early M70 Winchester 270, not the first rifle chambered for this cartridge—the M54 had that distinction—but the one most hunters think of when the 270 is mentioned.**

**Sixty Years Young . . .**

## **The Venerable 270 Winchester**

**By Don Lewis**

**Photos by Helen Lewis**

**T**HE 100-yard target was bright in the Redfield 3-9x, and I tensed slightly as the 4-Plex reticle quivered to a stop in the 1½-inch bullseye. I completed the trigger squeeze while the reticle was stationary. My shot struck the very top of the white square. A second shot hit the left bottom corner, and I finished the string of 3 by putting the last in shot almost in the middle of the white. Not a one-holer in any sense of the word, but a very good group from a light barrel deer outfit.

Two more 3-shot groups convinced

me the rifle was capable of staying under 1½ inches at 100 yards. Although it was a hot July night, I knew the M-77RL Ultra Light Ruger bolt action 270 would be with me on the first day of buck season.

With the race for the Magnum cartridge still in full swing, the necked-down 30-06 cartridge that came out in 1925 in the Winchester 54 bolt action outfit hasn't lost too much ground. During its 60 years, the 270 Winchester has often been both praised and criticized. A small segment of hunters still feels the 270 is nothing more than



a reduced version of the 30-06. As a matter of fact, there is quite a resemblance. The 270 case so similar to the 30-06 that headspace gauges between the two are interchangeable. There are slight differences though; for example, the 270's case is roughly .050 of an inch longer.

One thing that gave the 270 a favorable reception was its introduction in Winchester's brand new Model 54 bolt action rifle. You might say this totally new combination caught tens of thousands of hunters off guard. In other words, everything about it was new to the hunting fraternity—both the Model 54 and the 270 cartridge.

It would be stretching the truth to say I recall the controversy the 270 created during its earliest years, but I do remember an incident involving my brother-in-law and a customer. I was around 14 at the time, but I can still hear the man saying he wanted a 30-06 and not a 270. Unfortunately, my brother-in-law didn't have an '06 in the Model 54, and so was doing his best to sell the 270.

### Detractors

I said earlier that the 270 had its detractors. Most of their criticism came from the 270's light bullet and speed (early factory figures claimed the new creation had 3,160 fps muzzle velocity with the 130-grain bullet). Apparently, the speed and explosive action of the lightweight bullet generated a feeling of distrust toward the new cartridge. Few seemed to notice that the 270 offered better long range potential than any other cartridge available to American hunters at that time. Winchester took note of the "destructive" action of the 130-grain slug and came out with a 150-grain bullet at a velocity of roughly 2650 fps to satisfy the hunter who felt the 130-grain destroyed too much meat.

It's somewhat of a paradox that most of the hunters who demanded a heavier slower bullet for the 270 refused to use it and stuck with the sizzling 130-grain.

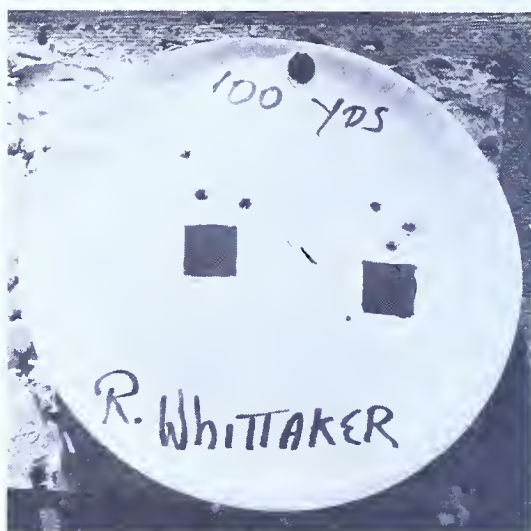


Naturally, the 30-06 crowd came down rather hard on the new entry, claiming it was a reduced version of the famous '06 and could never equal it. Keep in mind that in that time period, handloading and benchrest testing belonged almost exclusively to gun builders, ballistic experts, and gun writers. The home chronograph wasn't even dreamed of. Published ballistics were accepted with pure faith. The average hunter of the 1920s bought rifle cartridges to shoot game with and not to waste cutting holes in paper.

When home reloading swept the nation in the early 1950s, the varmint hunter learned in a hurry that the 100-grain slug coming out of the 270 Winchester above the 3400 fps mark was extremely potent at long ranges. In fact, many gun buffs feel the 270 with the 100-grain bullet is superior to any varmint load in the 30-06.

**BASICALLY, the 270 is simply a necked-down 30-06, as is obvious here with a pair of the smaller-caliber cartridges flanking the famous government load.**





**THE 270 HAS ALWAYS** given good hunting accuracy, as shown by typical groups fired by Lewis, left, and Russ Whitaker with M77 Ruger Ultra Light.

Early accusations against the 270 centered around the 130-grain bullet. Long range big game hunting was not in vogue, and it was felt that bullets ranging from 150 to 180 grains offered more stability in heavy brush. It's a known fact that old-time big game hunters favored heavy bullets. Consequently, the 130-grain 270 slug was considered too fragile.

### Winning Converts

While the 270's detractors hammered away at the new cartridge, it kept winning converts by the thousands. Of course, top-notch writers like Jack O'Connor, Russell Annabel and Col. Townsend Whelen kept the 270's popularity on the high side.

Probably the thing that hurt the 270 most was constant comparison with the 30-06. That puts me in mind of the people who claim venison doesn't taste like beef. Why should it? It's unfair to expect the 270 to perform in every category like the old military '06. Commonsense should tell us that the designers of the 270 must have had a sensible reason to modify the 30-06 case to accept .277 diameter bullets. I have no information on what prompted the necking down of the military case, but I have always felt the 30-06 lacks in long range accuracy

with bullet weights below 150 grains. If my assumptions are correct, it's not unreasonable to feel the bullet designers of the 1920s thought that reducing the diameter and lengthening the bullet would produce a higher ballistic coefficient and thus make a better long range bullet.

Bullets of the same diameter and weight have the same sectional density. This is the ratio of a bullet's weight in pounds to the square of its diameter in inches. In other words, all 150-grain 308 bullets, regardless of their shape, have an SD of .225. However, the ballistic coefficient of a bullet (which is a measure of the bullet's ability to overcome atmospheric resistance in flight) can vary greatly even when diameter and weight remain the same. Mathematically, BC is the ratio of a bullet's weight to the product of the square of its diameter and its form factor. Thus, the shape of the bullet is important here. For instance, a certain Speer 150-grain 308 round nose bullet has a BC of .266, yet the Speer 308 150-grain spitzer hits .389. Due to slight changes in shape the BC of a certain bullet type may vary with each manufacturer. Speer's 130-grain spitzer 270 bullet has a BC of .408 and Hornady's 130-grain 270's BC is .374.

To show how reducing diameter





**TIM LEWIS ZEROES IN** a Ruger No. 1 International 270 wearing Bushnell's new 2-8x Banner Compact, a fine combination for the hunter who wants something a little different.

makes a longer bullet in the same weight and affects other factors, Hornady's 130-grain 308 spire point bullet has a sectional density of .196 and a BC of .299. Hornady's 277 diameter 130-grain spire point has an SD of .242 and a BC of .374. From a pure ballistic viewpoint, the 130-grain 277 bullet has more to offer the long range shooter than the 130-grain 308 slug.

The 130-grain bullet is so popular in the 270 that many hunters feel it's the only choice for big game hunting. Through the years, the 150-grain 277 bullet has been sadly overlooked. For one thing, the early factory version 150-grain bullet was slowed down considerably, but the *Hornady Handbook of Cartridge Reloading*, third edition, shows their 150-grain 277 spire point will hit 2900 fps with a maximum load of IMR 4350 powder. Velocity is not the only factor to consider when choosing a bullet weight, but the 270 Winchester is not just saddled with one bullet weight.

The whitetail deer hunter has all the bullet needed with the 130-grain in the 270, but elk, moose and big bear hunters should take advantage of the 150-grain slug. It has a higher potential for maximum penetration. With a muzzle velocity of 2900 fps, the

Hornady 150-grain 277 spire point offers 2800 foot pounds of energy at the muzzle, 2400 at 100 yards and 2046 at 200 yards. The 130-grain Hornady spire point at 3000 fps puts out 2600 pounds of energy at the muzzle, 2168 at 100 yards and 1800 at 200. Numbers do not prove conclusively all things, but it seems pretty clear to me that the 150-grain bullet in the 270 Winchester has plenty to offer the big game hunter. In heavy brush, it might be the wiser choice.

### The "Other" 270

Right about here, I have to give some space to the "other" 270 cartridge: the 270 Weatherby Magnum. Around 1943, Roy Weatherby developed the 270 Magnum by shortening and necking down the 300 H&H Magnum case. Like all Weatherby's cartridges, his 270 Magnum has a radius shoulder (not a sharp angle-slightly curved). The case capacity of the 270 Weatherby is significantly greater than the Winchester 270 and it offers more in both velocity and energy with the same bullet weights.

Although the 270 Weatherby Magnum has been on the scene for over 40 years, it has never generated a large following. This is difficult for me to understand since it is very similar to

the popular 7mm Magnum cartridge.

Since it's a larger case than the conventional 270, it can handle the heavier 150-grain bullet easily. Going back to the Hornady manual, the 270 Weatherby can push the 150-grain Hornady spire point out the muzzle at 3000 fps, churning up 3000 pounds of muzzle energy and maintaining 2200 fp at the 200-yard mark. That's a lot of punch from a .277 diameter bullet.

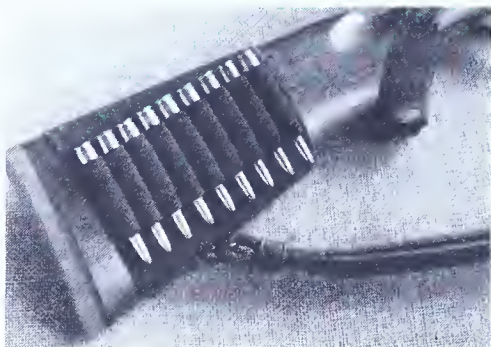
I don't know why the 270 Weatherby Magnum isn't carried by more long range whitetail hunters. Perhaps the rather high price tag of the superb Weatherby rifles limits their numbers among Pennsylvania's deer hunting clan.

One major deterrent could be the fear of recoil. Somewhere the story got out that Weatherby cartridges have a horrendous backward shove. Hogwash! I don't have exact figures, but several recoil tables I've seen show that the 270 Weatherby 130-grain generates around 17 foot pounds of recoil. Many 12-gauge shotgun rounds are in the same category.

What is the outlook for the 270 cartridge from here on? That I can't tell you, but it should be bright. A lot of big game hunters would spend more time practicing if they were shooting the 270 Winchester cartridge instead of a larger caliber Magnum. At least, that's how I see it. . . .

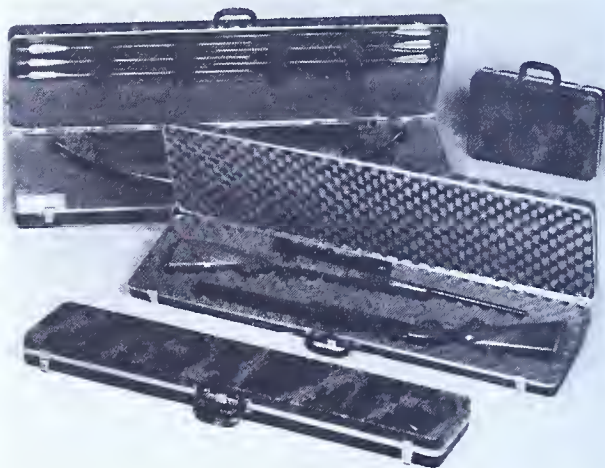
---

## GUNnews for Shooters . . .



Butt Stock Shell Holders for both rifles and shotguns are now available. These elastic slip-on units grip stock firmly, leave no marks when removed. Five shotshells or nine rifle cartridges can be carried. Opening in lower seam accommodates sling swivel stud. Black only. (Michaels of Oregon, P.O. Box 13010, Portland, OR 97213.)

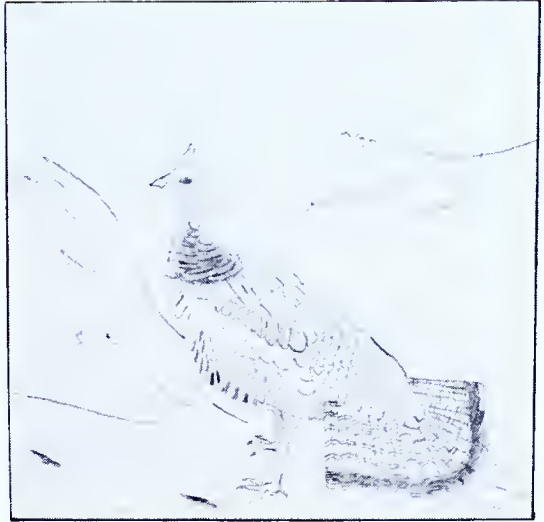
Hard firearms cases with a camo pattern fused into the plastic material (not applied or painted on) are now available for one or two long guns, bows, and handguns. Full thickness at corners, full-length piano hinge, foam lining, and multiple locks are other features. (Penguin Industries, Airport Industrial Mall, Coatesville, PA 19320.)





# young artists page

**Grouse**  
**Philip Hollinger**  
**Denver, PA**  
**Gehmans Mennonite School**  
**9th Grade**



**Gobbler**  
**Daryl Zander**  
**Telford, PA**  
**Souderton Area High School**  
**12th Grade**

# *In the wind*

bob mitchell



Thirty young peregrine falcons provided by the Peregrine Fund of Boise, Idaho, were raised and released in western Wyoming last summer, bringing to 103 the total number of birds released there since 1980. Of 73 earlier released, 62 are known to have survived at least through the first month after fledging, the most critical time for young raptors. At least two falcons previously released have returned as adults, nested, and successfully raised young of their own, making researchers especially optimistic that peregrines will once again be thriving in this portion of their former range.

Last year Missourians voted to increase their sales tax rate to provide funds for soil and water conservation work. The tax is now in effect and \$16 million was recently allocated. Every conservation district received \$10,000 for hiring staff, \$8 million will be used to help landowners implement conservation practices, \$2 million will be used to provide low interest loans for conservation purposes, another \$2 million is going to four watershed projects, and \$1.5 million will be used for soil surveys.

**The West Virginia Department of Natural Resources and the North Carolina Wildlife Resources Commission recently completed a trade in which West Virginia received 20 river otters in exchange for 36 wild turkeys. The otters were released in the Little Kanawa River, northwest of Charleston, WV, and the turkeys—being “Mountaineers”—were released in western North Carolina.**

A 22-day experimental mourning dove season was held in southern Michigan this past fall. Following an assessment of its effects on the state's dove population, along with public opinion and sportsmen's reactions, it's expected the state's Natural Resources Commission will establish a statewide season every year, which will make Michigan the 38th state to implement a mourning dove season.

Three Connecticut men found guilty of violating the Lacey Act, which prohibits the interstate transportation of illegally taken wildlife, lost their hunting privileges and rights to purchase firearms for at least three years. Two of them were also fined \$1000 each and given 3-year sentences, and the third received a \$500 fine and a 2-year sentence. The trio had been poaching deer, an estimated 75 a year, and bear in New York, Vermont and Connecticut, and selling them to individuals and restaurants.

**Inmates at New Jersey's Cape May County jail were kept busy this past year growing an especially prickly shrub, rotunda holly. According to the National Wildlife Federation, the shrubs will be planted beneath the windows of senior citizens' homes to deter burglars.**

Mississippi has become the 33rd state to establish a state income tax checkoff system to help support nongame wildlife management. According to the Wildlife Management Institute, more than \$8 million a year are being donated to these programs.

Since November 1984, the number of wild California condors has dropped from 15 to only nine, and researchers with the National Audubon Society suspect lead poisoning as a major factor. A dead condor—the only one of the missing six recovered—was found this past April with high levels of lead in its blood. In addition, three of seven wild condors captured for radio tagging had high lead levels. Condors, it's thought, are ingesting lead bullets while scavenging on deer shot and left by poachers. The number of condors in captivity has increased, though, as a total of 13 were produced this year at the Los Angeles and San Diego zoos.





*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in *GAME NEWS*. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. If you are not sure of which maps you want, write for a PGC map order form.



# PENNSYLVANIA GAME NEWS

DECEMBER, 1985

60 CENTS





Make Check or Money Order  
payable to:

*Shown here are seven of the publications now  
available from the Game Commission. All prices  
include tax, handling and postage. When  
ordering ask for a complete list of the Game  
Commission's free and paid publications.*

**PENNSYLVANIA  
GAME COMMISSION**  
Dept. AR, P.O. Box 1567  
Harrisburg, PA 17105-1567

**Birds of Pennsylvania, By James and  
Lillian Wakeley . . . . . \$10**  
**The Wingless Crow, by Charles Fergus . . . . . \$10**  
**Mammals of Pennsylvania, by J. Kenneth  
Doutt, et al . . . . . \$ 4**  
**Gone for the Day, by Ned Smith . . . . . \$ 4**  
**Pennsylvania Wild Game Cookbook . . . . . \$ 4**  
**Pennsylvania Trapping Manual,  
by Paul Failor . . . . . \$ 3**  
**Woodlands and Wildlife . . . . . \$ 2**



**Richard L. Thornburgh**  
Governor**COMMISSION MEMBERS**

**Thomas P. Greenlee**, President  
Tionesta

**Taylor A. Doebler, Jr.**, Vice-President  
Jersey Shore

**C. Dana Chalfant**, Secretary  
Gibsonia

**Elmer M. Rinehart**  
Stroudsburg

**Paul E. Hickes, Jr.**  
Alexandria

**Donald R. Craul**  
Lewisburg & Wellsboro

**Roy J. Wagner, Jr.**  
York

**EXECUTIVE OFFICE**

**Peter S. Duncan**  
Executive Director

**Harvey A. Roberts**  
Deputy Executive Director

**Ross E. Starner**  
Comptroller

**BUREAU DIRECTORS**

**Kenneth L. Hess**  
Administration

**Dale E. Sheffer**  
Game Management

**Lantz A. Hoffman**  
Information & Education

**Jacob I. Sitlinger**  
Land Management

**Gerald D. Kirkpatrick**  
Law Enforcement

**Lyle M. Koons, Jr.**  
Mgmt. Info. Systems

**GAME NEWS**

**Robert S. Bell**  
Editor

**Robert C. Mitchell**  
Assistant Editor

**Betsy Maugans**  
Editorial Assistant

**Libby Williams**  
Circulation

**FEATURES**

<b>The Briar-Patch Buck</b> .....	3
By Phil Ruffner	
<b>A Cloud-Nine Record</b> .....	8
By Bob Banghart and PJ Bell	
<b>At the Moosewa Hunting Club</b> .....	11
By George Spaid	
<b>Season Of The King</b> .....	16
By Joe Parry	
<b>Protecting Our Wildlife Habitat</b> .....	22
By Gregory J. Grabowicz	
<b>The Way to Finish the Year</b> .....	27
By Douglas Meyers	
<b>December 14th</b> .....	30
By John D. Taylor	

**NEWS**

<b>Field Notes</b> .....	36
<b>Conservation News</b> .....	41
By Ted Godshall	
<b>In the Wind</b> .....	62
By Bob Mitchell	
<b>Annual Index</b> .....	63
By Betsy Maugans	

**COLUMNS**

<b>Young Artists Page</b> .....	43
<b>Another View</b> .....	44
By Linda Steiner	
<b>Outdoor Wildlife Learning</b> .....	46
By Bill Einsig	
<b>DGP Diary</b> .....	48
By Joe Carlos	
<b>Thornapples</b> .....	51
By Chuck Fergus	
<b>GAMEcooking Tips</b> .....	54
By Carol Vance Wary	
<b>From Print to Practice (Archery)</b> .....	55
By Keith C. Schuyler	
<b>You and Your Deer Rifles (Guns)</b> .....	58
By Don Lewis	

**COVER PAINTING BY KEN LAAGER**

(Cover Story on page 26)

PENNSYLVANIA GAME NEWS (ISSN 0031-451X) is published monthly for \$6.00 per year, \$16.50 for three years, or membership in Pennsylvania's Cooperative Farm-Game Project or Safety Zone Project; to Canada and all other foreign countries, \$7.00 U.S. currency, per year. Published by the Pennsylvania Game Commission, 8000 Derry St., Harrisburg, Pa. 17105-1567. Phone (717) 787-4250. Second-class postage paid at Harrisburg, Pa. CHANGE OF ADDRESS: POSTMASTER: Send both old and new addresses to Pennsylvania Game Commission, P.O. Box 1567, Harrisburg, Pa. 17105-1567; allow six weeks for processing. Material accepted is subject to our requirements for editing and revising. Author payment covers all rights and title to accepted material, including manuscripts, photographs, drawings and illustrations. No information contained in this magazine may be used for advertising or commercial purposes. Copyright © 1985 by the Pennsylvania Game Commission. All rights reserved.

NOTICE: Subscriptions received and processed by the last day of each month will begin with the second month following.

# Ninth Deer and Bear Measuring Program

PENNSYLVANIA DEER HUNTERS are legion. Approximately one million of them — men, women and youngsters — take to the woods each season, and they kill a lot of deer. That fact has been known for generations, but for a long time it was believed there were few real trophies among the harvest. It was hard to present an opposing viewpoint, because most of the bucks any individual saw, alive or dead, were small. That's understandable, for a high percentage of the animals taken in any season are young deer, 1½ or 2½ years old in December, and thus haven't had time to grow a large rack, even if they have the potential to do so. Nevertheless, a few persons were convinced that many large impressive racks were being taken each year in Pennsylvania, and some twenty years ago, in 1965, the Game Commission began measuring antlers — and bear skulls — and keeping accurate records. From the first, the internationally recognized Boone and Crockett scoring system was used. This made it possible to directly compare a Pennsylvania trophy with others taken anywhere in the world. It quickly became apparent that this state was providing trophies that compared favorably with those from any other state. We have reported on these many times, both in GAME NEWS and in our big game records booklet.

All of this is background for the announcement that the ninth big game scoring program will be held in April, 1986, at the Game Commission's six regional offices, as follows: Northwest Office, 1509 Pittsburgh Road, about two miles south of Franklin along Route 8; Southwest Office, 339 W. Main St., Ligonier; Northcentral Office, one mile south of Jersey Shore on Route 44; Southcentral Office, one mile west of Huntingdon on Route 22; Northeast Office, at the intersection of Routes 118 and 415 between Dallas and Harveys Lake; Southeast Office, along Lauer Road off Route 222, five miles north of Reading.

Scoring date is April 5 for the Northcentral, Northeast, Southwest and Southeast regions, April 6 for the Northwest and Southcentral regions. Hours are 10 a.m. to 4 p.m. for all. Those who submit the largest trophies will be feted at appropriate ceremonies next fall.

The following rules will apply: 1. All racks, including spike bucks, will be measured. Only clean bear skulls will be measured; all adhering flesh, membrane and cartilage must have been removed. 2. Sawed, split or repaired skulls will not be measured. 3. Antlers may not show removed or repaired points. 4. Trophies must have been taken in Pennsylvania in fair chase, as defined by the Boone and Crockett Club. 5. Trophies will not be measured if taken on regulated shooting areas or private preserves. 6. Trophies must have been taken in compliance with the Pennsylvania Game Law. 7. Trophies measured in a previous Game Commission program may not be re-entered. 8. All measurements of the judges will be final. 9. The Pennsylvania Game Commission retains the right to reject any entry. 10. The Pennsylvania Game Commission shall not be responsible for any trophy lost or damaged.

If you take a buck or bear in Pennsylvania this year, or have a rack or skull from a previous year that hasn't been scored, bring it in.—*Bob Bell*



# The Briar-Patch Buck

By Phil Ruffner

I BURST into my friend's clothing store in Brookville, hurried past several startled customers, rushed to the rear where Dick Crooks was waiting on a shoe customer and shouted, "He's the biggest buck I've ever seen!" That was the beginning of my 1982 deer season, a season that would climax on opening day with an ending right out of a Hollywood script.

Actually, the hunt began the season before. I had been lucky enough to get a 6-point on opening day, and much of the next two weeks was spent in scouting new areas.

One evening during those two weeks, I was leafing through an outdoor magazine and came across an article that caught my attention. The writer told of getting many large Pennsylvania bucks—after opening day—by following one principle: Hunt where no one else will go. His argument made sense. Big bucks—truly big Pennsylvania bucks—do exist, and they will almost always be in places that are nearly impossible to hunt. Swamps, slashings, thick Christmas tree plantings, blowdowns, laurel and rhododendron thickets—all represent this kind of hunting. If the hunter avoids these places, you can bet the big bucks don't.

## Obvious Reason

I knew of such a place. I had driven past it many times, although I had never hunted there. The reasons became obvious when I scouted this place the next morning. A fresh snow had fallen during the night, so I decided to look for deer sign.

The sign was there. New buck rubbings, old buck rubbings, trails, trails that crisscrossed—all were there, as well as droppings, fresh deer beds and bouncing white tails. But I can tell you now that I was one scratched, blood-

ied, would-be deer hunter that day. I couldn't go a dozen yards without tripping over a hidden log, falling in a tangle of rotted wood and blackberry briars, picking up my L. L. Bean watch cap for the thirteenth time, or wiping the droplets of blood from my briar-scratched face.

During one of those falls it happened. Standing, I couldn't see 15 yards in any direction; but from ground level, a maze of tunnels and paths was visible. I had fallen over a hidden tree stump when he got up several yards away. I couldn't tell how big he was or how many points his antlers had, but one thing was sure: He was a buck and a big one.

I crept on all fours in this "underground" deer haven. Narrow avenues extended everywhere. It was fascinating. All a deer had to do was lie up here and no hunter was ever going to find him. This buck knew that, and if I hadn't literally fallen into his bed, I never would have seen him.

I didn't forget that buck for seven months. I couldn't wait until August. I always plan my deer hunts in August, while others are playing golf or vacationing at the shore. Deer hunting is far from their minds. I decided to hunt

**I FOUGHT my way through the briars and looked for a track. I wanted to etch that print indelibly in my mind; I wanted physical evidence that what I had seen was not an apparition.**









that impenetrable no-man's land where I had seen the buck. I knew I had much work to do, trying to figure out something that would give me an edge.

One warm August morning I made the first of numerous trips to The Briars, a name I gave to the secret spot. I walked an old logging trail at first, putting off the inevitable. But I knew that eventually I'd have to plunge into that mess of briars. I was thinking of the previous December, and my steps finally took me to the spot where I had seen the buck.

And then he stood up! Points jutted everywhere. He had the most magnificent set of antlers I had ever seen and he was big. He must weigh 200 pounds, I thought, and there he is, looking right at me. Wow!

He was gone. He'd been there and now he was gone. He just vanished into that thicket, the briars swallowing all 200 pounds of him instantly. I stood there looking oddly at the place he had been. I fought my way through the briars and looked for a track. I wanted to etch that print indelibly in my mind; I wanted physical evidence that what I had seen was not an apparition. I found the track. Even on hard ground that August morning, the buck had left a huge print in the soil near a rotted hemlock log. I left, drove to town and excitedly told Crooks of my adventure.

After leaving the store I made up my mind: I was going to get that buck. I have hunted Pennsylvania whitetails many times, and I realized my goal was almost impossible. Yet, from that point, I spent weeks in preparation for opening day. What a surprise that day would finally bring.

Space will simply not permit telling of all the trips to The Briars and the hours I spent thinking of that buck and how to get him. Several examples will serve.

There was the time I dragged a 40-foot aluminum extension ladder to the patch and placed it in a hemlock thicket overlooking the dense briars. I

waited and watched on many fall evenings—fruitlessly. I constantly searched for a pattern. Where did he feed? When? What bedding places did he have?

I found no easy answers. He was in those briars but I couldn't see him. I was lost. Then one moonlit night, I got the answer. I'd learned this buck didn't feed early with the other deer, and I couldn't spotlight past midnight. But I could sneak into those briars in the moonlight, climb my ladder and see what would happen.

### A Little Trail

Wearing a down-filled parka, I left the house at 9 o'clock that September evening. I left my pickup a mile from the briar patch and made my way down the dirt road. This 60-acre slashing has no easy entrance, but I had worn a little trail to my ladder. I moved cautiously to the hemlock thicket. It took me three-quarters of an hour to walk one mile. The clunk of my binoculars against the ladder made me angry. He won't show now, I thought.

But I hadn't been up that ladder fifteen minutes when he walked under my perch. He was beautiful in the moonlight. He made soft little grunting sounds, similar to the bleating of a sheep. He wasn't nervous. He didn't jerk his head up every minute as does do. He felt safe; he never knew I was there.

Driving to work the next morning, I mentally traced the events from December to the previous night, and I got my answer. For weeks I'd been looking for a key, a pattern, and it had been there all the time. On the three occasions when I had seen him, he always came out of a little tunnel. A man would have to crawl on hands and knees to follow it anywhere, but he moved with ease. Standing, the path could barely be discerned; kneeling, I could see perhaps 20 yards into the brush.

In October I bought a rope, cut some used barn boards into four-foot



**I HADN'T heard a thing but suddenly he was there. His neck was twice its normal size and his polished antlers were even bigger than I had dreamed. He paused, turned, and went back up the tunnel.**

lengths, grabbed some 12 penny nails and lugged everything to the briars. I couldn't nail a platform to a tree, but I built a suitable one and roped it to two hemlocks. Now my wait and fears began in earnest.

Would some lucky bowhunter get him? Did other hunters know he was there? Would he change his pattern? What about rutting season—would he move out with a harem of does? I pondered these and other possible problems many times as I sneaked into the slashing and climbed to my treestand.

Early in November I got my answers. Rutting season peaked one cool Saturday morning. I left the house at 5:30 a.m. and found my way by flashlight to my stand. He came out of the tunnel at 6:45. I hadn't heard a thing but suddenly he was there. His neck was twice its normal size and his polished antlers were even bigger than I had dreamed. He paused, turned, and

went back up the tunnel.

I was obsessed with getting that buck. To succeed in this one-on-one encounter would be my ultimate deer hunt. Maybe that explains what happened next. It certainly affected the outcome. . . .

Two weeks before opening day, I skipped church one rainy Sunday morning and built a new treestand. I had found new trails crossing at different angles to the tunnel and I wanted to cover these on opening day. I thought I now had several chances instead of one. This decision changed entirely the course of events on opening day.

At 6 a.m. on opening day, I was soaked. Rain began in earnest fifteen minutes later. But I was determined to stay here all day.

Rifle shots rang out on the ridge above me. Does filtered by in two's and three's. The rain lingered. More shots across the creek. A button buck walked under my stand. I was nervous. Three more shots on the ridge punctured the silence. There! I saw points from an awkward position in my stand. He minced forward and angled toward me, a little 6-point. I passed him up. It was only 9:30 and the big guy was going to be mine.

### **The Big One**

I knew it was the big one the second I heard the brush crack. The does had scared him out of hiding and he came barreling down the tunnel. I couldn't see anything except the tips of those white antlers. There was no opening, no chance for a shot. He was heading for the creek. It was happening so fast, yet it seemed in slow motion. I searched frantically for an opening. There was none. He was going to get away. "Please, no!"

I clambered down from the stand and headed for the creek where I had last seen those horns. "He crossed right under my *first* stand," I moaned, "right where I knew he would!"

I made my second mistake. Had I stopped to think about it, I would have



backed off his trail, let him alone. He would have been back in that slashing the next day. Instead, I spent two hours tracking him *in the mud*. All this did was drive him completely out of the slashing. . . .

The phone rang at 7:30 that evening. A hunting friend said, "We got your big buck. Come take a look." This man regularly hunted several miles from the briar patch, but I had hinted to him on several occasions that I was after a trophy. He's pulling my leg, I thought. That buck didn't go that far.

I pulled on my parka and left the house. I met John Hegburg on the way. He had seen the dead buck and was returning home when I told him to park his pickup, get in mine, and we would take another look.

I knew he was "my" buck the moment I saw him. I had memorized every idiosyncrasy of that rack. There was no doubt — he was the briar-patch buck.

Later, we pieced together what had happened. One man told of seeing a tremendous buck crossing a field while he was dressing out his 5-point; an-

Subscribe to

# GAME NEWS

For a Friend . . .

other man and his boy shot at him by the red camp; others saw him cross the ridge; Dick shot him on the other side. It all added up.

I think about the briar-patch buck quite often. Field officers of the Game Commission said he would have been 220 pounds "on the hoof." His 10 points had a 22-inch spread and the main tines measured 11 inches high. He had been 5½ years old. There have been bigger Pennsylvania bucks, but he was a beauty.

Yes, I think about the briar-patch buck when I take the polaroid snapshot from my gun rack and look again at those antlers. "I almost did it," I muse. "He crossed right under my stand. . . ."

## GAME NEWS

Enclosed find check or money order for \$\_\_\_\_\_ for my subscription to Pennsylvania GAME NEWS. **Remittance must accompany order.**

☐ NEW    ☐ RENEWAL    \_\_\_\_\_  
ACCOUNT NUMBER

(Check One)

In U.S.    ☐ 3 Years \$16.50    ☐ 1 Year \$6.00

To Canada and all foreign countries

☐ \$7.00 per year in U.S. Currency

Name \_\_\_\_\_  
(print plainly)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_  
(Zip Code)

NOTE: All remittances should be made payable to the

PENNSYLVANIA GAME COMMISSION

Mail payment to GAME NEWS, P.O. Box 1567, Harrisburg, Pa. 17105-1567

DO NOT SEND CASH

Please allow 60 days for first copy.







For me, my monstrous bear was . . .

# A Cloud-Nine Record

By Bob Banghart

As told to PJ Bell

I GUESS THAT once in everybody's life, things go right. I could have missed the bear as easily as shot him. But then I wouldn't be getting all this attention, and I wouldn't have that fine trophy. It's hard not to brag just a little. He was a mighty fine bear.

My first opportunity to hunt Pennsylvania black bear came in 1984. Work had prevented me from taking vacation during previous seasons. I'd never felt cheated in earlier years, but now that I was retired I wanted to give it a try.

I arrived in camp on November 18, the day before the opener. It was a quiet Sunday, cool and no wind. I got the old house to warming and started the generating plant. Lost Eight Hunting Camp had been a farm back around the turn of the century. In 1922, eight hunting buddies started out from Salladasburg in Lycoming County. They wanted to hunt just outside of town, but got lost on Puterbaugh Mountain. Eventually they wandered onto the farm and, in the process of getting directions back to Salladasburg, learned that the land and dwellings were for sale. They bought it. Today the camp has twenty-two members, most of whom turn up in bear season.

Monday's hunt started at daybreak. I was carrying my Remington 760 Gamemaster and wearing the lucky red tassel cap my aunt had knitted—a winning combination.

Our way of hunting is to drive and watch, going carefully so as not to spook the quarry too much for the next run. After pushing through thick laurel for the first two drives, I was dog-tired.

"Listen up, guys," I said, when we met to organize the third drive. "I'd just as soon not move from this spot."

"One more to go," Carl Gray said. "Come on, Bob . . . you're not worn out yet."

Lucky for me, Carl and Bud Barlett got me up and moving.

I was assigned to put out the watch while four drivers got into position. I motioned three watchers to the swale on my left. I put one man in the clearing and was about to move on when the last guy told me to stay.

"You're more tired than me," he said.

"Older, you mean."

He shrugged and kept walking. "Blow your whistle when you want the drive to end."

I picked a good sitting log in big timber, where I could watch a high laurel ridge. The drive seemed to be taking much too long, but I was comfortable and the day was nice. My watch showed eleven-twenty-five. I waited until eleven-forty.

## Ready to Blow

The whistle was in my mouth, ready to blow, when the brush on the ridge started crackling. I raised my rifle and dropped the whistle. When the bear came into view, I heard myself mumble in disbelief.

I'd seen bear in deer season. I'd seen them along stream banks during fishing season. I'd seen cubs and sows and bears I thought would make fine trophies. But never had I seen the likes of this creature. He was enormous, and he tore through laurel like King Kong in overdrive, a huge black overpowering bulk. Finally, he closed in to about

40 yards, running to my left. I fired, shot again, and lost sight of him behind the upturned roots of a dead maple. Slowly, I lowered my Remington. I couldn't remember raising it, though I could bring back a mental image of the bear in my scope.

I heard him thrashing so I picked my way over, being extra careful rounding the fallen tree. He hadn't gone more than a few yards after the second shot, but he was kicking and gnashing his teeth. I didn't have to shoot again, though. Even as I watched, he grew silent and still.

### Placed to Kill

Both shots had been placed to kill, I learned later. One penetrated the lungs, the other touched the heart.

I hadn't had a shot at any game in almost six years, and the sight of that huge bear struck me silly. I felt like a kid again. I let out a whoop and a chuckle. Pretty soon I was laughing.

"Hey," came a shout from Ed Oyster, the next watcher over. "What's going on?"

"Just killed the biggest bear ever seen," I shouted back. "Hold firing. We don't need any more to drag out."

The driver who was to have come out near me ended up at the last watcher on the other swale. A handful of the fellows had gathered there, waiting for the rest of us to show. They were listening for the whistle, so my shots came from a direction they knew. They came hustling toward the shooting, charging into sight with Carl Gray in the lead. Then that group of men stopped stock-still, staring at the bear.

"I don't know whether to shake your hand or kick your butt," said Carl. "That's a monster, a real prize. But why did you shoot him three miles from camp? Six men couldn't budge that bear."

Jack Shaffer and Walt Bieber hiked back to camp with the heart and liver, a combined weight of 35 pounds. They returned with sandwiches and a strong rope.

"Seeing how you're responsible for all this, you can do your bit by carrying our load while we haul yours," one of the fellows said. They emptied their rifles and handed them over.

The young guys did most of the dragging. There was a time I was young and gung-ho, too, but I can't keep up their pace for long these days.

We took few rest stops, but we did gain some new blood during one of the pauses. A little more than halfway back, we met two teenagers and their father. They belonged to the next camp down. Shohocken's members are mostly from the Philadelphia area, and these boys had never seen a bear outside of the zoo before. Their eager help was welcomed by the drivers they spelled. In the end, eight men needed five hours to bring the bear out of the woods.

He weighed 507 pounds field-dressed. That bear was in prime condition, stomach filled with acorns and a fat layer almost seven inches thick across the back. A slaughterhouse butchered the carcass, and I split the meat with the Lost Eight gang, who all pretty much agree it's some of the best game we've eaten.

Realizing I'd taken an unusually large black bear for this part of the country, I took the skull to a taxidermist for scoring preparation. When he cleaned the skull, the taxidermist found that the butcher had sawed the back edge off of it. Even so, the Game Commission scored the skull at 21<sup>7</sup>/<sub>16</sub> inches, which makes it one of the biggest bears ever taken in Pennsylvania.

I'm disappointed that the skull was cut, because big kills like this don't happen often. They're a once-in-a-lifetime thing, at best. I hunted all my years without shooting anything bigger than a 6-point whitetail. But that's changed now. The 1984 buck season also brought me a lovely 8-point. And for bear season, what can I say? My trophy may not be number one in the record book, but when you're floating on cloud nine, it's hard not to brag just a little.





THE MOOSEWA CLUB goes back a long ways. This photo was taken in 1906, when their hunting was done from tents, not a cabin.

**A Hunter Looks Back Sixty-Five Years  
to His Early Days . . .**

# **At the Moosewa Hunting Club**

**By George Spaid**

**I** AM THE only living member of the Moosewa Hunting Club who camped at Spruce Run Gap and lived in tents in hunting season more than sixty years ago. Therefore, it falls to me to tell how camp was set up and used before our club built a permanent cabin with coal heat, pumped water, bottled gas for cooking, an electric generator for lighting—practically

all the conveniences of home. I do this so our younger generations can understand the feeling for the outdoors—to carry a gun and hunt—that has been handed down to them. It's the same feeling that made the older generation endure hardship for the pleasures of the outdoors . . . perhaps I should not say hardship, for chores were divided, cooperation and fellowship prevailed, and what we think of as discomfort today was the way of life.

This story was written by George Spaid, of Harrisburg, the third generation of Spaid's to hunt with the Moosewa Hunting Club. It is an account of his first deer hunt in 1920.

Fortunately, the first week of deer season and Snyder County institute coincided. As there was no school the week of institute, I could spend the whole time in camp. After a restless night of anticipation, Mom's faint



**HORSEPLAY** was part of camp life in the early days, perhaps even more than now. Above, author's grandfather with a fine buck taken with double-barrel hammer gun of 12 or 10 gauge.

noises in the kitchen were enough to get me out of bed and dressed without being called—rather unusual. After a hearty breakfast, last-minute scurrying for mislaid things and last-minute instructions, Dad and I walked to the Selinsgrove railroad station where he bought our tickets to Middleburg and placed our box of hunting equipment in the baggage car. Each hunter had a wooden chest with changes of clothing, blankets, and toilet kit to be taken into camp.

### Nash Quad Truck

In Middleburg, we saw to the unloading of our equipment and carried it to the home of Mr. Stetler, president of our club. A half-dozen club members were taking equipment stored since last hunting season from the barn. Soon John Renninger's Nash Quad Truck arrived—four-wheel-drive, solid rubber tires, slow but powerful—and the loading of equipment started. The boxes containing the tents (one is still upstairs in our cabin, used to store spare quilts) went on first, then two bales of straw for bedding (that's where I sat for the trip), then the personal boxes contain-

ing the members' hunting equipment. On top of these were piled all the groceries, meat, kitchen equipment, lanterns, coal oil for the lanterns, ax and saw. Nothing could be forgotten or brought into camp later. When we were in camp that was it . . . the only way in or out was to walk.

I am told that before Renninger and his truck took the camp equipment into Spruce Run Gap—our club hunted at Running Gap from 1912 to 1915 and at Spruce Run Gap after 1915—they would hire Steve Rhoadarmel, who lived at the Forest House, to take his team and pick up our equipment at the Mifflinburg railroad station and haul it into Spruce Run. The hunter who didn't go into camp with the team or truck would go by train to Mifflinburg and get a livery man to take him to the Forest House and walk into camp from there, four miles up Old Gap and over Sand Mountain.

After a cold rough ride—all dirt roads—we arrived at the foot of the mountain, and just past the Forest House we started the slow, low-gear grind up Old Gap. The only road into camp, I am told this was the old stage



road from Lewisburg to Jersey Shore. After a stop in Old Gap to replenish the water which had boiled away and to let the engine cool, we started for the top of Sand Mountain. Until the cars of the early '30s, I don't know of any car that wasn't boiling by the time it reached Old Gap. The people who had a cabin there always kept a bucket on the porch.

On top of Sand Mountain we left the road and dropped down into Spruce Run Gap. Things really got rough here. We followed the bed of an old railroad, and four-wheel-drive really was necessary. There was no bridge over Spruce Run, so the truck plowed through the stream to reach our campsite.

The truck was quickly unloaded. It left with instructions to come back at the end of hunting season for the return trip to Middleburg.

It was past noon when we arrived, and camp had to be set up by nightfall, so things got active. One group cleared the ground and erected tents, another assembled boards into a table and bunks, others cut wood from the pile of chestnut logs previously gathered by Steve Rhoadarmel and his son Ralph, deputy forest rangers. Raymond Winter was chief ranger then.

In Spruce Run Gap at the time there was a two-story log cabin, about 16x16, and a stable. We kept lumber for our table, and bunks, also our two chunk stoves, in the loft of the stable from year to year. The cabin and stable were used by the forest ranger when he made his inspection trips throughout the year. During deer season a gang of hunters from Milton used the cabin. Their leader was named Oberdorf and his sons were John, James and Henry. A quarter-mile beyond our camp was another group of tent hunters from Forest Hill, led by Ralph Rhoadarmel, Dewey Miller and a man named Wagner, so we had company. We always had good relations with the other camps, taking turns for choice of hunting areas. This we still do today.

In one of our tents a table was made by driving posts into the ground and placing boards on the cross pieces. A bench was attached to the table on each side. Equipment boxes were placed along the wall of the tent and used for additional seating. Near the entrance the cook stove was set up. This was a sheet iron box on iron legs with a door at one end. A short table for the cook was erected alongside the stove. He had his dishpan, cupboard for dishes, flour, sugar and water bucket on that table. The table we ate from ran lengthwise with the tent.

The groceries, meat, two bushels of apples, two barrels of oysters and a half-wheel of switzer cheese for lunches were kept in a smaller tent called the commissary.

The sleeping tent had a chunk stove similar to the one in the eating and recreation tent. This stove, too, was just inside the entrance flap. Sleeping bunks were made by laying a board floor about six feet wide and the length of the tent at each side except that there was room near the stove for a night's supply of wood. Boards were placed on edge so each side platform was, in effect, a shallow box. These bunks were set as level as possible on stones; some places the floor was eighteen inches off the ground, other places right on it. Then straw was spread on the bunks to a depth of about six inches, and blankets placed on the straw. By the end of the week the straw was compressed to perhaps two inches. There was a narrow pas-

### Last Chance

Don't delay any longer. At the end of this month all remaining supplies of Pennsylvania's first waterfowl stamp will be destroyed. These stamps, the 1983 design featuring Ned Smith's "Sycamore Woodies," are \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Order today from the Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567.



**OLDTIME HUNTERS ALWAYS** seem to have a capable look about them, and this group is no different. The results on the meat pole prove they were an efficient gang.

sage between the foot ends of these bunks so the hunters could get to bed without stepping on their sleeping companions. The man nearest the stove was supposed to feed it occasionally throughout the night, but this didn't always happen.

The eating and sleeping tents were about 14x20 feet in size. Each had a four-foot wall and was equipped with a fly. They could be made smothering hot, but cooled off quickly in cold weather when the fire wasn't tended.

### Cutting and Splitting

Each evening there was the job of cutting and splitting enough chestnut wood to last the next twenty-four hours. Dad always seemed to take on that job, and recruited me to help him. He always growled at me for "pushing" and "riding" the two-man crosscut saw.

We always had a cook to prepare the meals and wash dishes. Meals were always good. What wouldn't taste good after a long cold day in the mountains? After the season, many a hunter almost lost his happy home when he in-

nocently remarked, "This isn't as good as Homer makes," or almost had his arm broken when reaching across the dinner table to spear some meat a la Moosewa.

Many jokes came out of the cooking situation—as when McAdams made rice for supper and ended up using every available dish, including the wash basin and water bucket, to hold the overflowing rice. And then there was the time Sam roasted a twelve-pound piece of beef until it was the size of his fist. On the other side, we always had two barrels of fresh oysters in the shell (\$2.50 per barrel). Many would shuck a dozen or so for a bed-time snack, but when Scott Ritter made scalloped oysters in a special big deep pan—a layer of crackers, a layer of oysters and pound of butter, a layer of crackers, layer of oysters and a pound of butter—man, that was eating!

After the supper dishes were put away, there always was a penny ante game at one end of the table, and often a game of Hi-Low Jack and the Game or pinochle at the other. Light-



ing was a problem. We had kerosene lanterns to hang from the ridgepole, and the last few years in tents we had gasoline lanterns.

They really had hunters in camp back in those days. The watchers were on stands and the drivers lined up ready to go as soon as it was light enough to see. Throughout the season we hunted until at least 4 o'clock. One reason for the long day was the thickness of the underbrush and the low dense scrub oak and laurel on the mountains then. Today, we cover the same ground in two-thirds the time it took those days.

I am told that when Moosewa members first hunted Chestnut Flats the area couldn't be driven toward the west as they would snag their clothing moving against the blown down chestnut trees; so they hunted Chestnut Flats east, going with the dead trees. I have seen places that had thick scrub red oak change to open woods due to maturing trees shading out the low underbrush; otherwise they hunted then as we still do in our club, with watchers stationed at known deer crossings and drivers to get the deer moving.

I don't remember seeing anyone wearing Woolrich-type clothing back in those days when we tented, and certainly not insulated underwear, boots or clothing. I wore leather shoes and army leggings, and often had wet feet. After drying the shoes above the chunk stove over night, for the first mile of walking, it felt like I was wearing wooden boxes on my feet. Some wore galoshes or arctics over shoes, some had low rubbers with thick felt stockings, a few had rubber lace boots or rubber-bottom leather-top boots. Jim Baker always wore knee-length rubber boots with thin socks. I never could understand why his feet didn't freeze and how he kept his ankles from turning over.

The hunting coat of that day was canvas. It was made suitable for deer

A slightly different version of this article appeared in the Middleburg Post in 1974.

hunting by getting Mom to sew ten cent's worth of red cloth over the shoulders and down the back.

The rifle of that day was a lever action. Most were Winchester Model 94s in 30-30 or 32 Special. A few Model 95 Winchesters in 30-40 Krag or 405 caliber, and Savage Model 99s in 303 or 250-3000 were seen. I had the only bolt action rifle in our gang, a World War One surplus Canadian Ross in 303 British caliber. Everyone used open sights, most guns having buckhorn or semi-buckhorn rear sights. No one ever heard of a scope for hunting, and we didn't use slings because they caught in the brush.

When a deer was killed, a sort of stretcher was made from two dead chestnuts about two inches in diameter and ten feet long, laced with rope. Two men put their heads between the poles and carried the deer into camp. Others would carry the rifles and occasionally spell off the carriers. This method was used because of the difficulty in dragging a deer through the thick brush.

### Built Cabin

In 1924, we built our cabin, completing it except for the porch which we added in 1925. The road was constantly being improved, and was pretty good by 1928—good enough that we could drive our own cars into camp. In the middle '30s, the CCC—Civilian Conservation Corps—improved many of the remote roads throughout the state, and we could then drive in and out without trouble. Today, the “hardship” times are over. But we never have any more satisfying hunts than in the old days when we hunted from tents.

# Season Of The King

By Joe Parry

**T**ALKING TO one's self is not unusual. To so do is human nature, fairly natural behavior. Especially among the hunting fraternity.

My knowing the above facts confirms that I am human, but I sometimes wonder whether answering my own questions is socially acceptable. I do that as well, and shamelessly admit to indulging in one-party conversations.

In the deer and grouse woods, I've gone so far as to talk to the trees, to the wind and, on occasion, a tolerant chipmunk. Last deer season I spoke to the wind and received an answer.

For the majority of my thirty years in the deer woods, I hunted alone. Pap, my father, moved to the West Coast with my mother when I was just out of high school, thus I lost my hunting partner, for I remained a Pennsylvanian. As a result, I was a loner during most hunting seasons. But occasional autumn days shared with friends were of priceless value. Last season I decided I would not hunt alone.

## Confession

During a pre-season chat with several friends—Woody, Charlie and Big Bill—a confession unfolded. It came from the lips of Big Bill. Although Woody and Charlie have excellent hearing, they did not hear Bill's admission: "Joe, would you believe I've never taken a buck, and I've been hunting 28 years!"

Woody and Charlie, therefore were shocked when they heard me invite Big Bill to hunt with me. They knew I usually hunted alone, and always alone in buck season. They also know of my three-year quest for a magnificent buck I'd named "The King." He was a deer that dreams are made of. But he was real and alive and I believe carried

the wildest blood ever to flow within a whitetail. He used that and more to evade hunters, especially this hunter, year after year. But I would change that this season. I would take him home the morning of opening day.

I had seen and touched this buck when he was in his fawnhood. He had a bad left eye which I diagnosed as being blind. By the time he was old enough to grow his first set of antlers, it was easy to realize this buck was special. His body conformation was like that of a quarter horse. It rippled with muscle. His headgear was no less impressive.

The first season in which I hunted him I declined a broadside shot as he came in with his left side to me. He was running with another buck that year, a buck I shot rather than take him from the blind side. The second season I dropped a running buck I thought was The King, but as it turned out, the dream of the season of The King remained alive. I would hunt him once more, 364 days later.

Big Bill and I planned our hunt a dozen times in the two weeks before the season. I assured him we would have our bucks on opening morning. His excitement grew after the man who owned the property we were to hunt confirmed that at least eight good bucks were running the farm and surrounding woods. One was alleged to be "my King." With this news, we elected to scout the area the following day.

Bill's excitement grew as we drove the red-dog road paralleling Mr. Georgetti's property. "By golly, Joe, this does look good. Reminds me of the northwoods." As we got out of his four-wheeler, seven deer bounded along a bench of the mountain we were about to climb. Bill just shook his head in disbelief. "You'd think they'd be bed-





ded by this time of day.” So far as he was concerned, we need not go any farther. We did, however, for I wanted to show him his stand above Sugar Run and check for sign.

As we topped the first hogback we jumped ten more deer, but we were not able to determine whether there were any bucks in the group. We prepared our respective stands and headed down the mountain.

### Something Off-Key

As we lumbered off the steep slope, something seemed off-key. Something wasn't quite right up there but I couldn't put my finger on it. Certainly there was sufficient sign. Plenty of rubs, scrapes and countless droppings, and the herd we had jumped . . . We were near home when it came to me. I hadn't seen the unmistakable rubs of The King which usually scarred the largest saplings, those which had a diameter of 5 inches or better. I comforted myself with the thought that I “knew” this buck, that I'd observed and hunted him for years. He'd be up there somewhere on opening day, and I would find him.

When Bill and I parted company, I asked what he thought of my favorite deer woods. His answer came in terms of “liver and onions,” thus confirming that he approved and was confident. He would kill his first buck and I would down The King of Sugar Run.

At 4:30 on opening day, Big Bill's four-wheel-drive pulled up in front of the house. I loaded my gear and we headed for an all-night greasy spoon.

As we got out of the truck I realized that Bill was wearing more fluorescent orange than I'd ever before seen on one man—perhaps more than on a camp full of deer hunters. I couldn't help laughing. When I explained why to Bill, he lifted a pantleg to expose more hunter orange: his socks. I should tell you that Big Bill is well over 6 feet tall, and into the modest neighborhood of 265 pounds. Unless one sees a giant like this, it's hard to visualize what that amount of hunter orange looks like all at one time. Nevertheless, I was already enjoying my season with a friend. He greatly impressed everyone in the diner as well. We suffered through breakfast and left for Sugar Run.

Navigating the steep mountain in the darkness was a chore, but added to the joy of hunting with someone. Stopping for a breather caused a nearby grouse to flush in the darkness, at which time I witnessed more airborne fluorescent orange than ever before seen by mortal man. When things settled down, we climbed some more.

Dawn broke cool but comfortable. I bolted a cartridge into the chamber of my Smith & Wesson 243 and stood up for a better view of the thornapple thicket which lay before me. Daylight was still merging with darkness when the first shot echoed from a southwest slope. No shots sounded from our side of Sugar Run.

I knelt to better scan the thicket. A deer slipped through the gray of the saplings. A doe. I then caught movement on my left side. Another deer.





This one carried a rack, but in the moments it was in view I wasn't able to get a clear shot, nor could I determine the size of the deer's antlers. It could have been The King; it could have been a 4-point. I didn't know for sure what it was other than a buck, and a decent one.

There still were no shots on our side at 8:30, and I was puzzled as to why those two deer had passed to my left. They normally travelled past this spot to my front and right. I wrote it off as bad luck and poor planning on my part, but still had my fingers crossed for Bill's good luck.

As the morning grew unseasonably warmer, I found Bill and suggested a new strategy.

"Bill, I'm going to push a section of woods on the other side of the stream that cuts through the big hollow over there." I pointed toward the hollow and said, "Why don't you find a likely crossing on this side and sit a while. Maybe I'll shove one your way, if I can keep them from crossing over to the next farm. If I can't keep them on this side, we're in trouble, buddy. I don't know the owner and his land is posted. I do think those critters are holed up in a sapling thicket across this hollow, though. They've gotta be. We should have seen fifty deer by now. Something is wrong and I'm going to find out what it is. Sound okay to you?"

Bill agreed to sit tight until I worked the thickets. He did, I did, and the effort proved fruitless. Bill saw nothing and all I saw was five waving tails, thanks to the cornflake-like leaves

that covered the ground deeply.

Bill asked, "Now what?"

We sat in silence for several moments, gathering our thoughts. I thought of how great it would be for Big Bill to get his buck through my driving efforts and from my favorite deer woods. He interrupted my thinking with, "Wonder where your King is now?"

Shaking my head, I said, "Oh, he's here, Bill. He's here. Probably watching us make fools of ourselves right now."

Seconds later a shot sounded from the posted land. A shot which, for some strange reason, left me feeling empty inside. Hoping the empty feeling was due to hunger, I pulled a sausage stick from my jacket and offered Bill a chunk. "Naw, thanks," he said. "I think I'll hoof it to the truck and eat my lunch."

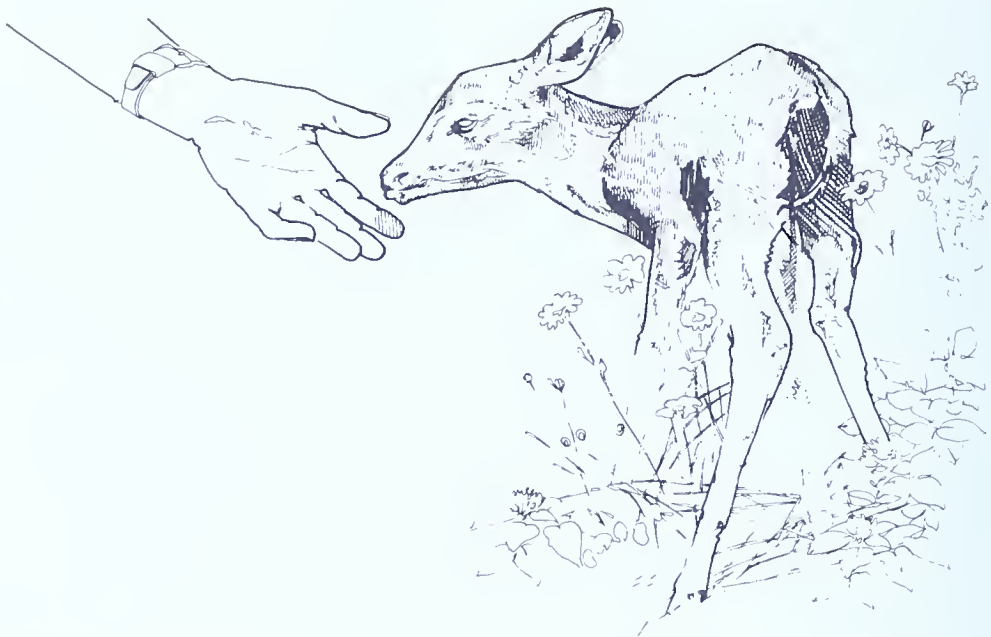
### Premonition

I rarely leave the woods until quitting time, so found it strange that I chose to do just that when Bill said he was going to the truck. As we walked, that lone shot echoed over and over in my mind. A premonition made me uncomfortable, restless and inquisitive.

"Bill, I'm going to take a walk up the road a bit. I want to check a couple of crossings. Maybe they'll tell me something."

As I rounded a bend in the road, I spotted two hunters with a deer. A man and a youngster. As I got a closer I could see that the buck was huge. Three more long strides, and I stopped





**I HAD SEEN AND TOUCHED this buck when he was in fawnhood. He had a bad left eye which I diagnosed as being blind. By the time he had antlers, I knew he was special.**

as though I'd walked into a wall. Then I started slowly toward the men and their deer, my gaze soaking in the sight of what had to be the most magnificent buck I'd ever seen east of the Mississippi. South of heaven, there could not be a buck more beautiful than the high-tined 8-point which lay before me—a deer such as most of us see only when our eyes are closed.

I knelt to examine the massive antler and turned the buck's head to inspect the left eye. It was clouded with blindness.

"Have you ever seen such a rack?" the man asked.

I told him I hadn't, and that this buck would surely score high in state records.

### How He Took The King

Ironically, the man wore the same type of cap as I, a fluorescent orange NRA Freedom cap. Excitedly, he told me how he took the King of Sugar Run. He had no idea his deer was the one I'd hunted and written about for several years. His story greatly softened the blow of knowing the season of the King had come. It also buffered the disappointment I couldn't help feeling. My three-year quest had been

in vain, yet, in a way, I was happy for them. They were the kind of hunters we of the fraternity can be proud of. They were courteous, neatly dressed, and the perspiration glistening on their foreheads was evidence they had well earned their trophy.

"You know," the older hunter said, "I've been deer hunting since 1969, and this is my first one. I never even got a doe. But what makes this so special is that it's my boy's first season. He did well in Hunter Ed class but we couldn't afford to get him a rifle this year. I figured I'd take him along anyway. For the training." He was glad his son had been along when he took his first buck, and the youngster obviously felt the same. I fingered the tines of the great trophy. Checking the bullet's impact on the right side, I noticed it was large and asked, "What did you take him with, an '06?"

"No," he said, "a 30-30."

"Were you on stand?"

"Nope. The boy and I were walking a ridge above an old orchard when I spotted a doe slinking through a small clearing. I whispered to the boy to stop a minute, and sure enough the buck came in behind her. Tell you one thing, I underestimated the power of that



little saddle gun. That big buck just went down in his tracks."

His story continued for a few more minutes. I didn't let on that his buck was the one I'd wanted for so many seasons. I felt it was better that way. I helped them get The King to their car, congratulated them, and said so long.

At the truck I told Bill of the buck. Because of the heat of the day, the dryness of the woodland floor and some discouragement, we decided to call it a day.

As we silently drove toward home, I thought of my son, Justin. How disappointed he'll be, I thought. He'd had great hopes that I would take The King. We had shared a three-year dream. I didn't look forward to giving him the disappointing news.

He greeted me in his usual, cheerful manner. "Hi, Poppa. How'd it go? Did you see The King?"

"No, partner. No buck today. But I did see The King."

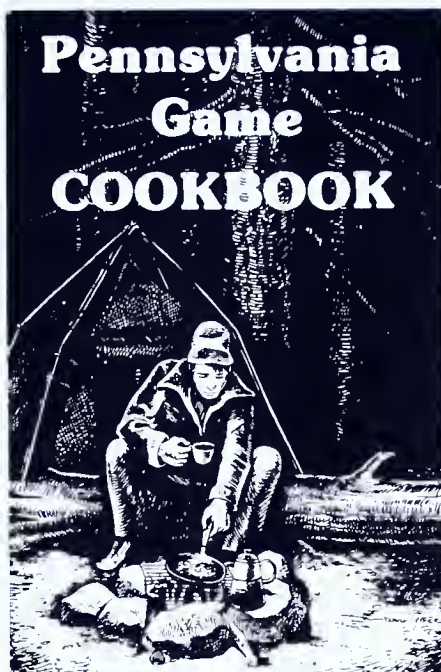
"What do you mean, you saw him?"

"Well, Justin, I helped load him into the car of another hunter. Old King wasn't on my side of Sugar Run this morning and someone else finally got him."

I told him the story. He listened and watched me through puddled eyes, then gave me the title for this story. "I thought sure this would be the season we'd have the King."

I explained that in a way we do "have" The King. That we had the pleasure of sighting him many times around the hollows of Sugar Run and that we have the memories of him in our hearts.

The next morning found me atop the same ridge. A breeze worked into a more mature wind and my thoughts



Pennsylvania Game Cookbook is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from GAME NEWS office.

turned to The King as I knew they would. I asked myself whether there would ever be another buck as great as he. And the wind, as it so often does in the deer woods, spoke back. "Of course. The King sired sons, and you will be here to hunt them. For now, be satisfied with all that this day brings." And, somehow, I was. The voice in the wind, of course, was mine.

## Thoughts While Walking

*I believe that man will not merely endure: he will prevail.*

—William Faulkner



**GAME COMMISSION OFFICERS inspect proposed peat mining site to ensure wildlife needs will be incorporated into the company's operation. Permits will be issued only if habitat protection requirements can be met.**

**Beyond the Law of the Bag Limit . . .**

# **Protecting Our Wildlife Habitat**

**By Gregory J. Grabowicz**

**Chief, Division of Environmental Impact Assessment and Minerals**

**E**ACH SPRING, a pair of song sparrows nests in a small thicket of unkempt shrubs in the corner of my backyard. My entire family enjoys their singing, and the children especially enjoy watching the birds build their nest and raise their young. But let's suppose I was of meaner temperament, and one day, unable to tolerate their incessant singing and messy droppings any longer, I shot one of the sparrows.

In my neighborhood this would be met with immediate and widespread wrath. The township police and dis-

trict game protector would be quickly summoned, and I would be arrested and fined. The next spring, however, would most likely find another pair of song sparrows nesting in the shady corner of my backyard, and, as before, song sparrows would be heard throughout the neighborhood.

On the other hand, if I cut down and removed the shrubs, my immediate neighbor would applaud my actions, happy that he no longer had to clean their leaves and twigs from his neatly trimmed lawn. Other neigh-



bors, unaware that this subtle change had occurred, would voice not the slightest protest. But the neighborhood — and the world — would contain one less nesting site for song sparrows and, all other things being equal, fewer song sparrows would be heard next year.

Habitat changes on a much larger scale occur all the time, and they are causing corresponding losses of wildlife. Every year, in Pennsylvania alone, 40,000 acres becomes unsuitable for wildlife. Of the 360 species of birds and mammals found in the state, 14 are classified as endangered or threatened, and 18 others are classified as species of special concern because of their declining numbers. The loss of suitable habitat is the reason nearly all these species are imperiled.

### **Environmental Awareness**

The decade of the '60s saw an environmental awareness develop in our society. It became widely known that our water, forests, wildlife and other natural resources were not without limits, and that indiscriminate developments were not without far-reaching ecological costs. People stopped taking our vulnerable natural resources for granted.

In 1969, in response to this awareness of how vitally important a clean and healthy environment is, not just to wildlife but also to the future of mankind, Congress enacted the National Environmental Policy Act (NEPA).

This act mandated that environmental impacts, both good and bad, be determined and made a consideration before any project funded with federal tax dollars, requiring federal permits, or considered a major action of a federal agency could be approved. This act requires that an Environmental Impact Statement be prepared and reviewed before highways, flood control projects, airports, hydroelectric facilities, and just about any other major construction project can receive final approval. In this process, modifications are made to circumvent

detrimental effects to the environment, or at least minimize those effects that are unavoidable.

NEPA has become the cornerstone of the nation's environmental protection program. Complementing NEPA is a variety of federal and state regulations, including the Fish and Wildlife Coordination Act, the Federal Clean Water Act, and Pennsylvania's Dam Safety and Waterway Encroachment Act.

As these more extensive and definitive laws were being passed, it became apparent the Game Commission would have to expand its traditional roles of wildlife law enforcement and public land management, and prepare to accept enforcement responsibilities for these new laws designed to protect critical and unique habitats from needless destruction. In 1975, the forerunner of the Environmental Impact and Assessment Division was organized within the Commission's Bureau of Land Management, and began to fulfill this need.

Backed with authority contained in pertinent federal and state legislation just mentioned, the new division's staff began designing the procedures to take a more active part in reviewing and commenting upon projects requiring state and federal permits, and/or completion of Environmental Impact Statements.

Other natural resource agencies became similarly involved, and soon an informal interagency team evolved. This team includes resource specialists from the U.S. Fish and Wildlife Service, the Environmental Protection Agency, the U.S. Army Corps of Engineers, the Soil Conservation Service, the Pennsylvania Fish Commission and representatives from the state's Department of Environmental Resources. This group spent a great deal of time and effort developing procedures necessary to most fully meet the intentions of environmental laws in Pennsylvania.

At present, Game Commission officers, particularly land managers,

The first article in this series dealt with a short history of the Game Commission's land acquisition efforts. After a brief administrative overview of the Bureau of Land Management, later articles covered land management objectives and procedures. Last month, the Federal Aid in Wildlife Restoration Act was discussed. In this article, Greg Grabowicz explains the agency's role in having wildlife habitat considerations incorporated into the designs of major development projects. — Bob Mitchell.

Bulletin" so everybody has an opportunity to express an opinion on them.

In the next step, the interagency team determines the environmental costs associated with the project. The Game Commission assesses wildlife costs, other team members are responsible for assessing facts related to their agency affiliations. The determinations are based on the project proposal, field surveys, and cover maps supplied by the contractor or federal agency sponsoring the project. Cover maps depict habitat types—wetland, agricultural, reverting farmland and forested, for example—that will be affected by the project. From this information, the interagency team can closely determine the habitat losses that will result.

In evaluating major projects, this particular step is carried even further. More than just the number of acres of each habitat type lost is considered. Division specialists and other members of this team have developed a method, known as the Pennsylvania Modified Habitat Evaluation Procedure (PAM-HEP), to express habitat quality in quantitative units. In essence, an acre of optimum wildlife habitat is defined as one "habitat unit," and given a value of 1.0. Acres considered suboptimum are scored lower, 0.1 being the lowest possible value.

These numerical ratings permit not

Bulletin" so everybody has an opportunity along with biologists and division management personnel, are actively involved in reviewing stripmining operations, highway construction plans, selection of solid waste disposal sites, and stream and wetland encroachments caused by the construction of roads, pipelines and other rights-of-way.

The review process begins with a check to make sure all permit applications have been filled with appropriate state and federal agencies. For projects funded with federal tax dollars, a public notice containing details of the proposed project, its location and purpose, and estimated costs must be published. Such information notices are published in the "Pennsylvania

**IMPROVED** mining regulations protect wetland sites such as this from disturbance. Commission officers locate and map these sites during the permit review process.





only a more precise description of habitat losses associated with development procedures, but also give the ability to scientifically determine and implement project design changes to mitigate these losses. Mitigation, here, can be defined as reconstructing or recapturing those habitat values that would be lost as a result of unregulated construction.

By using quantitative habitat values as a base, and going through the mitigation process, wildlife management practices can be incorporated into a project proposal so that environmental losses are held to a minimum and those that are unavoidable are compensated for on surrounding land. In the end, mitigation arrangements are made a binding condition before permits are issued and work may begin.

A project designed to expand an existing flood control impoundment on the Cowanesque River in Tioga County exemplifies this review process.

The project was developed by the Baltimore District of the U.S. Army Corps of Engineers. It is designed to provide additional water storage capacity to be held in reserve for use when industrial users and power producers need to draw more water from the river than is permissible.

Enlarging the storage pool from 410 to 1085 acres and increasing its maxi-

mum depth from 45 to 80 feet will eliminate the wetlands which have evolved naturally around the existing impoundment and will flood surrounding uplands.

Using base maps supplied by the Corps, an interagency team comprised of representatives of the Game Commission, Fish Commission, U.S. Fish and Wildlife Service, and the Corps has determined the exact amount of each habitat type that will be lost as a result of this project. (A separate evaluation was made on impacts to the fisheries resource.)

### Described Quantitatively

These habitat losses were further described, quantitatively, using the value system mentioned, and this information was provided to Corps engineers.

To satisfy NEPA requirements and ultimately receive necessary federal and state permits, the Corps must include in the Environmental Impact Statement for this project several options designed to offset the environmental losses defined by the interagency team. These are reviewed, and the one that best fulfills the project's needs with the least environmental cost is chosen by the interagency team.

When the new storage facility is completed, 60 acres of wetlands and 680 acres of uplands will be flooded. To compensate for these losses the

**SIX of the 13 birds and mammals listed as endangered or threatened in Pennsylvania require wetland habitats to exist.**



# IT'S THE LAW



## Question

During big game season, are five or more hunters staying together in a hunting camp required to post a roster?

## Answer

No. A roster is not required unless five or more hunters are cooperating in the hunt as in the method known as driving. However, a posted roster makes locating a person staying at a camp a much easier task in the event of an emergency.

Corps will develop wetland areas around the new impoundment, plant beneficial trees and shrubs, and erect artificial nesting devices on higher grounds. Through this mitigation process, for each habitat unit lost through construction, a corresponding unit is gained through the implementation of wildlife management practices. The net result—no loss to wildlife.

This division is similarly involved, to some extent, on other kinds of projects. Since 1981, 65 major construction projects in 30 counties have been studied, and habitat recovery plans were prepared to enhance conditions for wildlife on 8500 acres. During the past year, 452 applications for surface mining permits were reviewed. Nearly 32,000 acres were examined for such

things as the presence of endangered and threatened species and the occurrence of wetlands and other critical habitats. These evaluations were forwarded to the Department of Environmental Resources' Bureau of Mining and Reclamation, and modifications based on them were made where necessary to protect wetlands and other threatened habitats from mining. After mining, PGC and DER representatives again inspect the sites to verify that backfilling and revegetating have been done.

Similar evaluations are made for highway, dam and other major projects.

In 1975, the Game Commission began taking an active role in protecting wildlife resources from unregulated development. At that time, the environmental review process was poorly understood. But over the past ten years, thanks to the hard work and dedication of environmental professionals in the Game Commission and allied resource agencies, proven techniques and procedures have been developed. This process is now recognized as a viable, scientifically based means of protecting our natural resources.

Undoubtedly, development will continue. But today, due to the procedures outlined here, projects cause minimal detrimental effects, and often actually work in harmony with our environment. A balance is being struck between dams and bog turtles, airports and herons, stripmines and plovers, and between housing developments and song sparrows.

## Cover Story

Expectations reach a fever pitch as deer season begins. As the red glow intensifies in the eastern sky, signaling dawn's awakening, every snapping twig and rustling leaf brings visions of an approaching 8-point to a million buck hunters. These sounds are most often stirring chipmunks, scampering gray squirrels or some other animal of little concern on this particular day. But not always. More deer are taken in the opening two hours than during any other such span in the season. Be ready—and be sure. This could be your year.



# The Way to Finish the Year

By Douglas Meyers

**W**ELL, I'VE made it through the regular firearm season again without a score, I told myself, getting ready for the 1983 muzzleloader season. I would be hunting the first day near home, outside of Hollsopple in Somerset County, but would be on my way to our camp on the Forest-Elk county border in the evening.

I draped my powder horn over my shoulder and picked up my flintlock which the previous season had proved lethal to a young doe. The back door latched shut as I started my mile-long trek to a desolate gray mountain which two months earlier had a blaze of orange and red leaves which ended at the frost line. I reached my spot in the pre-dawn hours and waited for the sun to appear above the opposite hillside. Sunrise brought with it warmth and new life to the forest floor. Flashpowder flowed into the pan as darkness mellowed into a mere haze. Immediately after, a red squirrel's chattering shattered the silence and soon a curious little bird, the nuthatch, began its twittering down an adjacent cherry tree.

## All Day In Woods

I spent all day in the woods, to see only one deer in a hollow by a place called Bloom's Mine. I had just settled down in the shadow of a pine bough when the clatter of deer in the frozen leaves was carried to my ears on the wind. I readied my gun as the deer took form in a hemlock grove. When my hammer clicked at maximum draw, the deer froze, wheeled around, and bounded off. Antlerless season had ended the day before, and evidently the deer were spooked out of their wits.

That evening, on our way to camp, I relayed the story to my brother, father and grandfather. I had been the only one to see any deer that day, but we all felt sure our luck would change at camp.

On Day Two I awoke to the smell of bacon and eggs and the "good-morn-

**THE GUN'S hammer was back and the trigger was set as I found an opening. This was to be my moment of truth. Would the gun work? Would I flinch? Would the deer spot me and leave?**



*Hornst*



**THE REST** of the day was fruitless for us. Both my brother and I had misfires with our muzzleloaders. Our group did see a lot of grouse and squirrels, but deer were our quarry.

ing" grin on Grandpa's face (really he looked like death warmed over). The four of us ate and then drove to Mill Stone Hollow, just inside Elk County. After we agreed on places we'd hunt and when to meet back at the car, I picked my way up through a pine grove intermixed with aspens and rocks. There were numerous snowshoe hare tracks, and bark shavings from a porcupine's dinner littered the ground. I slipped in between two rocks and over a small spring just in time to notice two deer disappearing behind a patch of mountain laurel. I figured my chances of catching up with them were slim while my companions were not far away from their apparent destination. Later that morning, I jumped a single doe from a few pines. She trotted per-

haps 25 yards and stopped to check on me. I had the gun shouldered, and as the tension grew, I squeezed the trigger. Click. The flint had struck the frizzen, but the spark didn't ignite the powder. The deer's bouncing white tail was all I could see when I recovered from my shock.

The rest of the day was fruitless for me and worse for my brother. He had seen and misfired at seven deer because the flint was set back too far to get a spark. The rest of the party reported seeing a lot of grouse and squirrels, but deer were our quarry on this day. Back at the camp, we served venison steaks from the crock pot and swapped stories of the day's adventures before turning in early.

Little did I know it, but Day Three would be one that will always live in my memory. It started out cold with a crunchy crust on the snow. I no sooner entered the woods than I was startled by the squawk of a bluejay as he went aloft from his aerial perch. I made my way to the spot where I had seen deer the day before and started clearing snow off a log for a seat. After two hours I had seen only a turkey strutting through an opening about 75 yards away. I knew then if I started to fidget I might as well crunch on through the pines, but I always fidget after sitting more than an hour and a half.

I wandered over to a small patch of rocks and glimpsed a porcupine waddling away. On further inspection, I found the little bear-like critter holed up in a crevice. I left him and went back to my log. I felt restless, and since we were all supposed to meet back at the car for lunch and it was now 10 o'clock, I decided to slowly work back to the car.

### Gunshot

Just before 11 o'clock I heard a gunshot about a mile up the hollow. I hoped it was one of my hunting party. Fifteen minutes later I stopped to mop my brow while poised on the top of a huge boulder. I decided to wait there until 11:30 because the other guys would be heading for the car and might drive some



deer to me. At that point, I was about a quarter-mile from the road.

I wasn't there long before I heard the unmistakable sound of deer hooves moving through the pines about 100 yards to my right. I raised the gun off my lap, thumb reaching for the hammer as my gaze searched the pines. There, 70 yards away, a set of deer legs was trotting toward me at a steady pace. The gun's hammer was back and the trigger set as I found an opening only 20 yards away. This was to be my moment of truth. Would the gun work? Would I flinch? Would the deer spot me and leave?

Now the legs were 35 yards away. I raised my flintlock as the head of the deer appeared in the opening. I saw a flash of white in the morning sun as I squeezed the trigger. The Renegade cracked and smoke filled the air. It cleared just in time for me to see the

deer turn and flee, tail down, into the pines. I reloaded, and walked up to the place the deer had been when I shot. There were indications of a lung shot. The tracking was short; the deer had only gone 30 yards before collapsing.

The deer was a fine spike of about 130 pounds. I field-dressed and tagged it, tied my rope about its neck and made my haul out to the ear. I was greeted by a friend, Davey, who told me my brother had scored on a doe.

I know you could see the pride on my face all the way back to camp that night. For you see, this was my first buck. I hope that someday I will be able to see my son with the same look on his face.

My father has always told me, "I would rather see you get a deer than to get one myself." I think that is because he taught me all I know, and he sees in me some of himself.

## PGC GUN AUCTION



A PUBLIC AUCTION was held this past fall to dispose of firearms confiscated from Game Law violators. The auction was held at the Middle Creek Wildlife Management Area and was conducted by auctioneer Richard P. McNeal. A total of 227 individuals registered to bid on the 94 firearms and two bows offered for sale. (No handguns were put on the block; these are sold only to licensed firearms dealers.) The auction brought in \$15,189. Some of the firearms and the prices for which they are sold: a 30-06 M1 Garand autoloading rifle, \$725; Ruger Mini-14, \$215; Ruger 10/22, \$85; Browning BL 22 with scope, \$130; Remington 513T, \$190; Winchester M250 with scope, \$170; Marlin M20 with

scope, \$100; Remington Model 591M with scope, \$150; Winchester M94 with scope, \$165; Winchester M70 (pre'64), \$430; Remington M760 with scope, \$300; 30-40 Krag, \$210; Remington M7600 with scope, \$310; Marlin M336 with scope, \$255; Remington M11-48, \$200; Winchester M97, \$175; Remington M721 with scope and rangefinder, \$450; and Savage Model 110C with scope, \$250. This was the agency's second public gun auction in as many years and, because they've been so successful and popular, one will probably be held every year.



# December 14th

By John D. Taylor



**WHEN YOU finally step into the water, thin shards of ice tinkle like chimes around the decoys. A pretty sound. One by one the decoys go into the bags.**

**S**NOW AND ICE crystals glisten in the mid-morning sun like tiny diamonds. The dawn flights are over and you can't understand why you're still out here, freezing. Your decoys bob and weave in the remaining patch of open water. They look so real this morning. In October they seemed to glow; now they're hard, sharp, almost harsh images. You look back to the horizon for the ducks you know won't materialize. Yet you sit and hope. This is the last day and all you can do is hope. Last night you hoped for a Canadian front to push down the few remaining migrants. Once again, you were let down. White puffballs, not massive gray beast-like clouds, punctuate the sky. Winter, the purifier, has stolen your morning. It's clear, cold, bright.

The sun feels good. Out of the wind, it penetrates the icy confines of your waders and the three pairs of wool socks to add a spark to your

frozen toes. You study the decoys again, knowing they must be taken up soon. Their black painted eyes look back and ask why. You sigh and ponder their fate. Stuffed away in burlap sacks they will collect dust in the basement for the next ten months. Your mind clears and you drift back to October, when you first took them out. The new anchor cords and snap-on-weights gave you fits that first black morning. There was a different sound to them when you tossed them out on the water. They looked so good in that dawn's peculiar red-orange glow. Your August painting session became well worth it when the sun illuminated the feathering on the hen mallard closest to your blind. Now in winter's cruel light, you see chips of paint gone, new dents and rubs. You make plans to repair them over the winter, maybe even add a few new ones. You also know you'll probably be doing it in August.

Now you rise from your makeshift blind—the old blind in the back bay was unusable—and look around. An ice skim covers just about everything. Might as well get 'em, you think. Your old camo coat looks out of place today. You don't know why you wore it. Maybe force of habit, maybe because it's so comfortable. There are no greens, browns or tans here, only white. It dominates everything. Gone are the golden hues of autumn. No glowing sunrises now, no orange leaves floating on the water. The trees stand stark and bare, stripped. They reveal their innermost secrets, leaving nothing to speculation. In October you spent idle moments wondering what was under their colored fall cloaks. It hurts to know there won't be any more golden mornings this year. It is an unceremonious end to the finest of all seasons.

You think back over the season. You



wish you could have gotten out more often. You quit the wetlands for a few Saturdays of cockbird hunting, then there were those two weeks occupied with whitetails. In November your time on the marsh seemed unlimited; after all, you thought, December was a month away. Now the end is staring you in the face. There is little to look forward to. No more orange, only white. No more short-sleeve days afield, only cold, colder, and coldest. You might try your hand at winter rabbits or grouse, maybe even crows, but somewhere along the way enthusiasm dims. You are no longer compelled to be afield. In September there was a spring to your step. It was coming, you thought, fall was almost here. Now it's gone and there is a dull, aching tiredness in your shoulders. Too many late nights and early dawns have reaped their toll. Too many briar patches fought through, too many miles logged in heavy boots. Yet there will never be enough of those things. Now more than any other time, you realize you are limited. Winter will be a time for sleep, for renewal. A time when thought and memory overrule action. You will recall this season. There are many things to remember. The flock of mallards that slipped into the decoys while you poured a cup of coffee, the ten teal "decoys" that suddenly appeared on the point—such images will haunt you for months.

### At Water's Edge

You pause at the water's edge to take a final look at your decoys. When you finally step in, thin shards of ice tinkle like chimes around the decoys. A pretty sound. Gertie is the first decoy into the burlap tomb. An ugly, over-size misshapen thing with virtually no neck, yet she is your favorite. One by one, the rest go back into the bags. This is a miserable job, you think. You trudge back to the truck, and throw the decoys into the back. One last time your gaze travels across the bay, searching, hoping, for some birds. In the distance you spot a small flock

traveling away from you, perhaps headed south. You smile, then laugh. Dumb birds.

Your thoughts drift ahead to springtime. Green leaves, warm weather, honkers coming home. You wonder if your fly box is still in a jumble. With the extra wood duck feathers you have for spring, you should be able to tie up some decent dries. You slam the door and turn the key. Your mind travels forward again. After spring comes summer, then fall. It's all one big cycle. You think about the Christmas puppy you'll be giving your wife. Funny thing, it's a German shorthair. He ought to be ready for his first hunt come October.

You drive down the road, the sadness dissipated. There will be a puppy to train, flies to tie, trout to catch, mosquitoes to swat, sunburn to soothe. Then it will all start over again. The leaves will turn red, then yellow, then that particular autumn glow will settle over the marsh once more. Doves, ducks, squirrels, rabbits, pheasants, deer, ducks. The cycle is complete in itself, never ending.

---

**TOM EATON, of Sarver, 1985 state duck calling champion, poses with son Todd, 5, who placed 3rd in the junior division during the annual competition at Pymatuning Waterfowl Expo. Proud mom looks relieved after enduring weeks of duck calling practice.**



# WHITETAILS &

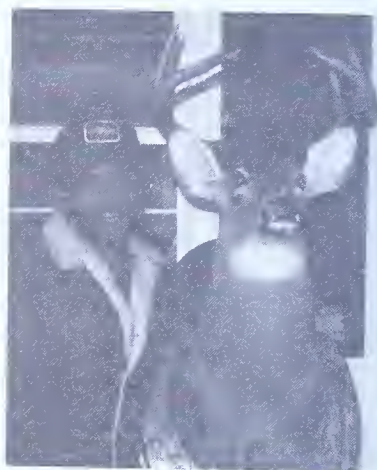
**HENCH'S CAMP**, near Coudersport, had a great season. Below, **JOE RICHARDSON** and son **ANDY**, Bethel Park.



**DON KELLER**, of Green Lane, and son **DERREK** display big 8-point taken on opening day of 1984 season.



**DAN PFEIFFER**, Mansfield, and 180-lb. 8-point.



**JOHN WEST**, Avella, took 200-lb. 9-point in Washington Co.

**BILL COLLINS**, Upland, got his 4-point in Elk Co.



**JOE SEISLY**, Washington's Crossing, bagged 12-point in Bucks Co.



**SCOTT**  
Station  
Son A  
the rea

**TR**  
**JRO**  
in w

**JIM ME**  
11-poi  
Lazze

**CLYDE KELLAR**, Du-Bois, took 400-lb. trophy in Elk Co. in 1983—his first bear in many years of hunting.





# BLACK BEARS



CLAIN, Cogan  
h big 9-point.  
D peeps from



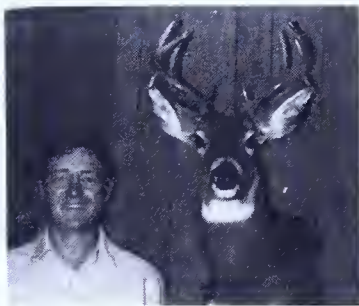
JOE Ettl, Whitehall, above, with his  
9-point. Below right, STEVE BRADY, of  
Norristown, and his 6-point.



RUN-A-MUK CAMP took six bucks  
on opening day in Cameron Co.  
DAVE MAST, below, of Oley, with  
his fine 8-point.



ATTERBURY, BILL WELKER SR. and  
ON and REX WELKER took five bucks  
Wford and Warren counties.



STEVE SATTler, Findlay,  
Ohio, above, and Warren Co.  
10-point. ARTHUR CRAGLE,  
below, Shickshinny, and his  
9-point.



KARL IMDORF, State Col-  
lege, and his 412-lb. bear,  
below. KIM BISBINY, above,  
with antlered doe.







**TERRY TULIP**, Wheatland, took 10-point in Medix Run area. Below, buck of **CHARLES WHITEMAN**, Coatesville, field-dressed 205 lbs.



**ANDY, JOHN, DAVE and EDDIE MILOSER**, of Glen Campbell, had an outstanding season, with two 7- and two 6-pointers.



Right, **BOB WRIGHT**, Carlisle, and Somerset Co. 8-point. Far right, **ROCKY MADISON**, Summerhill, with Cambria Co. 12-point. Both field dressed over 155 lbs.



**VINCE NOCITO**, Bristol, took buck at left. **CHARLES ANDERTON**, **BILL HAYES** and **DARWIN KEIPER** took theirs in Monroe Co.



**BOB MEIER**, Pittsburgh, took 365-lb. blackie in Elk Co.



**RON HARNER**, Lyndell, took his 8-point in Chester Co. **GARY FURRY, JR.**, below right, Claysburg, got piebald Y-buck in Blair Co.

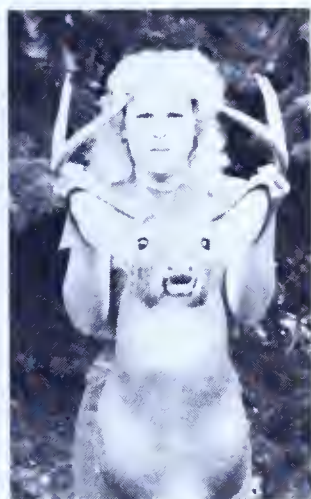






**GEORGE McKAIN**, of Mill Hall, above, and 21-inch 8-point. **JOHN KROCKER**, Pittsburgh, right, and Somerset Co. 13-point. Below, **GORDON HARRIS**, Morrisville, took this nice buck.

**DICK ROSS**, Latrobe, above, and 165-lb. 8-point.



**FAITH FALKNER**, of Hermitage, and her 8-point.



**DALE RIDENOUR** proudly displays big 9-point rack taken in Franklin Co. by **GUY McGLOUGHLIN** of Emmitsburg, Md.



**BILL MEST**, above, of Oley, and two of his trophies. **BILL KRATZENBERG**, left, got 8-point in Westmoreland Co. Below, **MARK STUART**, Christiana, bagged his 8-point in Lancaster Co.

**GARY ROBSON**, of Lebanon, took his bear in Tioga Co. in 1984.





# FIELD NOTES



## Something to See

**WESTMORELAND COUNTY**—The Southwest Region Office is somewhat of a tourist attraction. Hardly a day goes by that I don't spend time explaining to visitors what the different mounts on the walls are. Sometimes several groups come by in a day's time. If you've never stopped in our Ligonier office, do so. If I'm there, I'll be glad to give a tour.—DGP R. D. Hixson, Ligonier.



## Where Else?

**McKEAN COUNTY**—This past August a local resident told me of a friendly red squirrel living near his home. After noticing the squirrel busily collecting pine cone seeds, disappearing and then returning for more, the man began watching to see exactly where the squirrel was storing them. He found that it was going into his shed and, upon checking, found the squirrel's hiding place. Several canning jars belonging to the man's wife were full to the brim with pine cone seeds.—DGP Jim Rankin, Port Allegany.

## Barbie Has a 4WD

While taking my three kids for a walk on SGL 43, I pointed out the wild grapes, identified wildflowers and animal tracks, and generally encouraged their interests in the outdoors. I hope someday they will choose to hunt, but I've never pushed them in that direction. While walking along, three-year-old Lisa looked up and, out of the blue, said, "I'm going to hunt with you someday, Daddy. I want my own gun, a pink Cabbage Patch gun." I know the dolls have many accessories, but I doubt they'll ever make that one available.—IES Michael W. Schmit, Birdsboro.

## Big Brother

**TRAINING SCHOOL**—None of my family hunted, so I didn't start until a friend introduced me to the sport when I was 21. Mine is not a unique situation. After teaching a hunter education course, one of my students, 15-year-old Mark Zach, asked me to take him hunting. Understanding his predicament, I agreed. Boy, am I glad I did. I vividly remember his first pheasant and deer. Last year, when he shot his first buck—a 5-point taken in archery season—I wasn't with him, but I certainly didn't mind his early morning call announcing his achievement. Looking back over our four years afield together, I realize our moments together have been more important to me than filling my own game bag or downing a deer. So share your time afield with a youngster, and discover the real joys of hunting. You'll be glad you did.—Trainee Richard J. Shire.



## Make His Day

**CAMBRIA COUNTY**—As you're reading this, I'm trying to decide between waiting by the phone for someone to report a Game Law violation and going out on patrol and looking myself. Want to help me make up my mind?—DGP R. A. Lizzio, Johnstown.



## No More Fraternizing

**BRADFORD COUNTY**—Mount Pisgah State Park Superintendent Dave Rutkowski heard some strange yapping noises in his backyard one night. He investigated and found four red fox pups playing with his dog. Every night for the next two weeks the young foxes would sit in the shadows from the yard light and bark until the dog went out to play. They eventually got brave enough to eat the dog's food from his dish on the porch. Suddenly the visits stopped. Dave's idea was that mom found out what was going on and put a quick stop to such nonsense.—DGP William A. Bower, Troy.

## Ambulatory Otters

**TIOGA COUNTY**—The river otters released in Pine Creek are moving far from their release site. Unfortunately, I learned this only because one was killed on the road north of Wellsboro, at the junction of Routes 6 and 287.—DGP John Snyder, Wellsboro.

## In Concert

**TRAINING SCHOOL**—On a recent field trip to learn about stripmining operations, we were introduced to a new technology being used to reduce pollutants in water draining from reclaimed mines. Sphagnum moss and cattails, planted in a series of shallow ponds, apparently filter out much of the iron and also reduce the pH of the water to nearly neutral. This is just another example of how, with a little help, Mother Nature can solve our environmental problems.—Trainee George A. Wilcox.

## Two Out Of Seven

**TRAINING SCHOOL**—Last August we went on a field trip to examine wetlands and learn of their benefits to wildlife and man. By the end of the day we had visited seven different wetlands. Two weeks later we learned that one had been partly filled to make a parking lot and equipment storage area, and a second had been ditched and drained so that it could be mowed. Sorry to say, have we learned too well why many of our wildlife species are getting harder to find.—Trainee Richard S. Bodenhorn.

## In Action

Along old Route 8, in the Pecan Hill area, there is an old spring that was built many years ago by a very talented stone mason. As I drove by it one day last summer, I noticed a young couple mowing and pulling weeds, and picking up trash from around it. I stopped and Dan Bundy and Jodi Patterson told me they drove by the spring daily and thought it would be nicer if it were cleaned up. I congratulated them for their efforts. They seemed pleased someone had noticed their work, and I felt better knowing there really are people who care about how things look and will do something about it.—LMO Jim Deniker, Sandy Lake.

## Let The Sunshine In

**SNYDER COUNTY**—While getting into kneeling position to fire the shotgun, during a training course, I had the misfortune of splitting the seat out of my pants. Needless to say, I put on quite a “shooting show.” I figured I had to write a Field Note about this before my neighboring officer did it for me. —DGP John Roller, Beaver-town.



### A Total of Four

In compiling figures for my monthly reports, I'm reminded once again of the amount of work accomplished by our Food and Cover Crews to maintain herbaceous openings on State Game Lands. Between June 17 and July 31, my crews mowed 205 fields totaling 482 acres, and over 57 miles of roadsides. This year, they were responsible for spreading 54,500 pounds of fertilizer and 758,000 pounds of lime on these fields. This is in addition to the plowing, discing and planting of other fields they did, along with many other numerous and varied items of work which they performed. There are 28 land management groups in the state, and mine is probably about average in accomplishment. So, you can see, our State Game Lands fields are not being neglected. Incidentally, when I refer to the “crews in my group,” that means two crews—two people in each! Good work, gang. —LMO Jerry Becker, DuBois.

## 17-Year Treat

**ARMSTRONG COUNTY**—The brief appearance last summer of the vast hordes of cicadas evidently provided a real treat for many species of wildlife. The stomach of an illegally killed bear was packed with these insects. A wood turtle I found showed evidence of feeding on them; a young black rat snake that had been injured on the road had a cicada wing jutting from his mouth, and many kinds of birds ate them at every opportunity. Last but not least, my black lab must have thought they were some kind of special candy created just for dogs. Sadie gulped down around seventy of these bugs one evening as we sat on stakeout, not even taking time to chew them. —DGP Al Scott, Rural Valley.

### Whose Side Are You On?

**CLEARFIELD COUNTY**—Whenever another hunting season draws to a close, many hunters are disappointed because they didn't get a deer, bear or turkey. If you are one of those, think back on some of the illegal activities you witnessed this past hunting season but didn't bother to report. If you feel like reporting a slob now, do so. It's never too late to get involved. It's never too late to join SPORT. —DGP Don Zimmerman, Drifting.

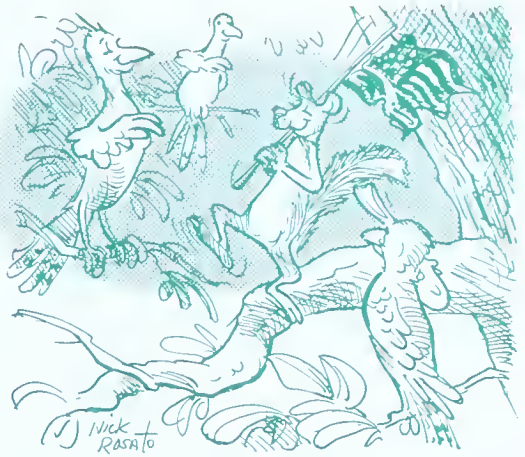
### Cut & Plant

Land managers and their Food and Cover crews put a lot of effort into creating small game habitat on State Game Lands. They mow, fertilize and seed areas. They plant seedlings and build brushpiles. They make many apple tree release cuts to enhance fruit production, and cut aspens to help promote root suckers. They invest much time and effort in these areas, all in the hope that, in future years, hunters will benefit from their projects. —LMO K. Harbaugh, Meadville.



## Light 'Em Up

**CENTRE COUNTY**—The Game Commission had an exhibit at this year's county grange fair that featured two electronically operated bird charts. The charts were wired so that a bulb would light when the name of a bird was matched correctly with its picture. This display was very popular, especially with kids. They enjoyed challenging each other on the identification of the various species. —DGP George Mock, Coburn.



## Yankee Doodle

**ARMSTRONG COUNTY**—It was several days before Rayburn Township Police Officer Lester Reeseaman could determine why the small American flag on his porch was frayed and torn. Looking out his window, Less watched a red squirrel tug, jerk and finally tear the flag loose, then race across the porch, up a pine tree and across the roof of Lester's garage with Ole Glory flying proudly behind him. Less said he really didn't mind, except the critter stole the flag just before the Fourth of July, and he did not have one to fly on the holiday. —DGP Barry J. Seth, Worthington.

## Crash, Splash

I wonder when Federal Aid Supervisor Harry Richards, of the Southwest Region Office, realized he was having one of those days. Was it when a motorist ran into the back of his state vehicle? Or was it later, when he had to hit the brakes fast and dumped a milkshake over the dash. Such occurrences would dampen anybody's day, but they were probably especially hard on Harry. He's our regional automotive officer. —LMO R. B. Belding, Waynesburg.

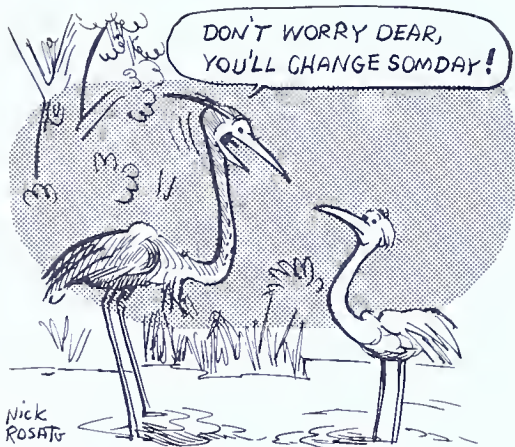


## In '86

**WAYNE COUNTY**—Hunting season soon will be nearing a close and our field officers and deputies will be trying to calm their nerves while spending some time with their families for a change. Have a happy and safe new year. —DGP Donald R. Schauer, Honesdale.

## Disrespect

With the aid of the Wildlands Trust Fund of Eastern, Pa., the Game Commission is acquiring an 1100-acre tract adjacent to SGL 52 in Berks County. With land difficult to come by in this part of the state, such purchases are especially valuable to the region's wildlife and sportsmen. It's too bad more people don't cherish these lands as we do. We can barely keep up with the littering and vandalism occurring on parking areas and rifle ranges. Sure, it's only a minority of users doing this, but it looks as if they're winning. We're all losing. We need help from you if we're ever going to gain control of littering and vandalism on Game Lands. —LMS Barry D. Jones, New Ringgold.



### Red as a Rose

After paging through my Peterson's bird guide while trying to photograph some herons, I began to understand why a person just getting into birdwatching might get confused trying to identify the various species. Did you know that an immature little blue heron is white, that an immature white ibis is brown, and that the adult green heron is not really that green and the immatures are brown? — LMO Stephen L. Opet, Tamaqua.

### High Ideals

**MONTOUR AND NORTHERN NORTHUMBERLAND COUNTIES**—I would like to dedicate this Field Note to all the kids and parents who worked so hard at this year's Montour and Northumberland County 4-H Roundup. I was honored to be invited back to judge all the "shooting sports" projects. These included classroom instruction, range instruction, and plenty of shooting experience with either air rifles, 22-caliber rifles, handguns, or archery equipment. I was impressed by the knowledge and skills shown by all the boys and girls whose projects I judged. It was obvious that these kids put considerable time, energy and pride into all of their projects. The 4-H motto, "To make the best better," is something we could all live by. — DGP Daniel I. Clark, Potts Grove.

### Persistent

**LUZERNE COUNTY**—This past summer an article appeared in the local paper about a problem the manager of the Williamson County Airport in Marion, Illinois, has been having for a year. Beavers keep blocking stripmine canals, backing up water to within 30 yards of the airport taxiway. The manager concluded, "You have to admire the beaver's work ethic, for they have been keeping up with the entire airport crew for a year, not counting the costs involved." Any conservation officer in this area will confirm those findings. — DGP Robert W. Nolf, Conyngham.

### One in a Million

**BUTLER COUNTY**—A gentleman recently told me about a grouse that had befriended him. It all started one day when the grouse flew into the open window of his pickup and landed on the seat beside him. The grouse was promptly removed, but for several days after, it followed him around as he did his chores. It actually became so brave that it could be picked up—quite a feat when you consider that some hunters have never been able to hit old thunderwings using a shotgun. — DGP Larry Heade, Butler.

### It's a Jungle

**MONTGOMERY COUNTY**—This past August, Deputy Mike Torrie responded to a complaint from a painting contractor. While working on a small scaffold 50 feet up on the side of a skyscraper in center city Philadelphia, his men were being dive bombed by a bird. Deputy Torrie, with help from the painters, was able to capture the birds and take them from the city. Just in case you're wondering, the culprits were a kestrel and her three fledglings. — DGP William Wasserman, Montgomeryville.



# 17 NEW EAGLES

By Ted Godshall

PGC Information Specialist

PENNSYLVANIA'S bald eagle recovery program received another boost in 1985 with the addition of 17 new birds. Four eaglets were hatched in wild nests in the Lake Pymatuning area in northwestern Pennsylvania this year. There were three nesting pairs of birds; two hatched one eaglet each, while the third nest produced two young birds.

One nesting pair included a female eagle released from New York as part of that state's hacking program in 1979. She mated with a wild eagle, but her nest was blown down in a severe windstorm, and the young eaglet succumbed after being thrown into waters surrounding the nest.

The other two Pymatuning nesting sites each received a foster chick from the Patuxent Wildlife Research Center in Maryland. The adult birds readily accepted the foster eaglets and raised them with their own offspring.

During the last week of June, 12 bald eagle chicks were removed from nests in the Churchill River valley in Saskatchewan. These chicks were brought to Pennsylvania; six were placed in a hacking tower in the Delaware River watershed, and the other half-dozen were raised in a Susque-

hanna River watershed hacking tower.

After the dozen translocated birds were old enough to fly on their own, they were released into the wild, bringing to 18 the number of eaglets raised in the last three years by the hacking procedure at each location.

Since release of the first birds from the hacking towers occurred in 1983, it may be only another two or three years before some of these birds return to their fledging locations to successfully nest and raise young of their own.

The bald eagle recovery program is funded by project allocations from the Endangered Species Fund administered through the U.S. Fish and Wildlife Service, and by a grant from the Richard King Mellon Foundation, which pays for the capture effort in Saskatchewan and subsequent payment of salaries of those hired during the summer to raise the eaglets until they are old enough to fly on their own.

Through 1988, about 80 eaglets will be captured in Canada and brought to Pennsylvania. The ultimate aim is to have reproducing birds in both the Susquehanna and Delaware River valleys, as well as in the Pymatuning area.

---

## 1986 Poster Contest

***"Sportsmen and Conservation—Working Together for Wildlife"*** is the theme of the 1986 National Hunting and Fishing Day Poster Contest. Since it began in 1978 this contest has grown in popularity each year. In 1985, students from 40 states participated. This year there are two divisions, Junior for students in grades 5 through 8, and Senior for 9th through 12th graders. Over \$7500 in U.S. Savings Bonds will be awarded as prizes. To become eligible for national awards students must first be winners in a locally sponsored NHF Day Poster Contest. Schools, conservation and civic groups, newspapers and sportsmen's clubs are encouraged to sponsor such a contest. Local contests need to be conducted soon; winning entries must be received at NHF Day Headquarters by April 4, 1986, to be considered at the national level. For information on how to sponsor or participate in a local contest, write to NHF Day Poster Contest, Dept. N., P.O. Box 1075, Riverside, CT 06878.

## Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Douth, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 2.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00

### Working Together for Wildlife Collectibles

_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH (Limited) .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
_____	1983 ART PRINT "River Otters" .....	\$125.00

### Wildlife Management Areas

_____	PYMATUNING WATERFOWL PATCH .....	\$ 3.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK WATERFOWL PATCH .....	\$ 3.00
_____	MIDDLE CREEK WATERFOWL DECAL .....	\$ 1.00

### Pennsylvania Bird and Mammal Charts

_____	Set 1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set 3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 by Ned Smith) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00

### SPORT Items

_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT License Plate .....	\$ 4.00
_____	SPORT Patch .....	\$ 1.00

### GAME NEWS

_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 5.00
-------	--	---------

### Waterfowl Management Stamps (Voluntary)

_____	1985 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1984 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1983 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance to Pennsylvania Game Commission, Dept. AR, P.O. Box 1567, Harrisburg, PA 17105-1567. Checks should be made payable to Pennsylvania Game Commission.

DO NOT SEND CASH

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_



# young artists page



**Bull Elk**  
**Michelle Jones**  
**Marion Heights, Pa.**  
**Lady of Lourdes High School**  
**10th Grade**



**Whitetail Buck**  
**Michael Newman**  
**Waterfall, Pa.**  
**Forbes Road Junior High School**  
**8th Grade**

# Doggin' It

**I**t's tough being a short hunter. For one thing, everyone walks faster than you, because you lack the leg length. By the time you catch up with your companions, they've had their break and are ready to start off again. They never stop to consider that, with your shorter stride, you've walked twice as far as they.

The other problem with being short is that you are looking through or under, not over, obstacles in the woods. My brother is well over six feet and a day's hunt is a completely different experience for him than for me. "I had deer jumping up like rabbits in front of me in the thicket," he'll say. All I saw were the twigs just before they hit my face. What he steps over, I have to climb or crawl under. I've often thought that when it comes to hunting deer in the thick stuff, what I need is a dog to boot them out, like in small game hunting.

A "deer dog" isn't such a farfetched idea. I don't mean the four-footed hairy variety, but a two-legged type, of any size, with enough heart to bust through the brush and tangles and roust 'em out. I'm talking about the one-man deer drive.

Compared to some antlered game such as elk and moose, the whitetail is scarcely out of the small game category. When it's chased, where does a deer run? Just like br'er rabbit, for that briar patch, or any other tangled cover. As deer season progresses, whitetails hole up like cottontails in

the thickets and it takes someone willing to play hound to break them from cover.

In Pennsylvania today, there are only rare examples of yesteryear's two-dozen-hunters deer drives. Few of us spend the season in camps with that many people who are willing to be that organized. Today, most hunters are independent. They travel by carloads or pairs or alone to their hunting spots. Or, with whitetails living closer to urban areas than ever before, mom and dad, dad and son (or daughter), or any such combination, can often walk out their back door and into the woods. These small groups may not think they can take advantage of driving to move deer, but I've got some antlers on the wall to prove the one-man "deer-dog" technique works.

In a large-scale drive, a big acreage is covered by lots of people, moving to standers who are watching (hopefully) all the exits. The idea is that with that crowd, someone is bound to get shooting. But the one-man drive, to one or two standers, can be just as effective. However, there are several requirements.

## Experienced Hunter

First, the driver—the "dog"—should be an experienced hunter, one with a good knowledge of deer habits. The secret of success in the solo drive is knowing in advance where the deer will go once they've been jumped up. All exits can't be covered, so the most preferred one, or two, should have the gunners. For example, I took a good 6-point from a stand on the saddle between two hollows, one closely grown with short pines, the other a brushy clearcut. The driver pushed from one to the other and I had the seat on the most likely runway. There's never a guarantee of which way a deer will run, so we try to get the best odds.

Second, the one-person drive works

## Another View...

by Linda Steiner



best when the parties are well acquainted with the terrain. That way they will know beforehand all the probable destinations and runways. In unfamiliar woods, I've pushed out a thicket one direction, producing no deer to standers, and later discovered another thicket, and a well-worn deer path, just over the knoll. However, on one drive in a well-scouted farmland wood lot, a "dog" pushed nineteen deer out to three standers. I took a doe with the bow, a male friend got another one, and another gal missed.

Without the manpower, the one-person drive has its limitations. Small patches of cover are the most effectively pushed. But even a few acres of saplings, laurel or briar bush can hide a lot of deer. Such small tangles are often skirted by other hunters, which makes them perfect to "dog."

The single driver should use a hound-type technique. Take a tip from a beagle casting about for scent. Zig-zag through the cover, as if hunting small game. One of a whitetail's favorite tricks is circling. By walking in an "S" pattern, a driver can sometimes keep moving him.

Just as a hound doesn't push or steer a rabbit, but follows it in the direction it wants to go, so the solo driver's main objective is to get the deer to their feet and traveling, in a natural manner, away from his disturbance. As in rabbit hunting, the shooter should be placed at the most obvious point of interception. Sometimes my favorite "deer dog," also my husband, "bays" when he's in the thicket, just to be funny. But that keeps me looking in the right direction for deer moving ahead of him.

I hunt mainly in a two-person team with my husband. It's an unspoken thing, but from many years of hunting together, we each seem to know where the other will be found, even though we leave the car in the morning and don't expect to meet until quitting time. My husband says that when he gets in certain terrain, he starts to look for me, because he knows it's the type



**TWO DEER HUNTERS** take time to discuss where one of them will go on watch while the other makes a one-man drive.

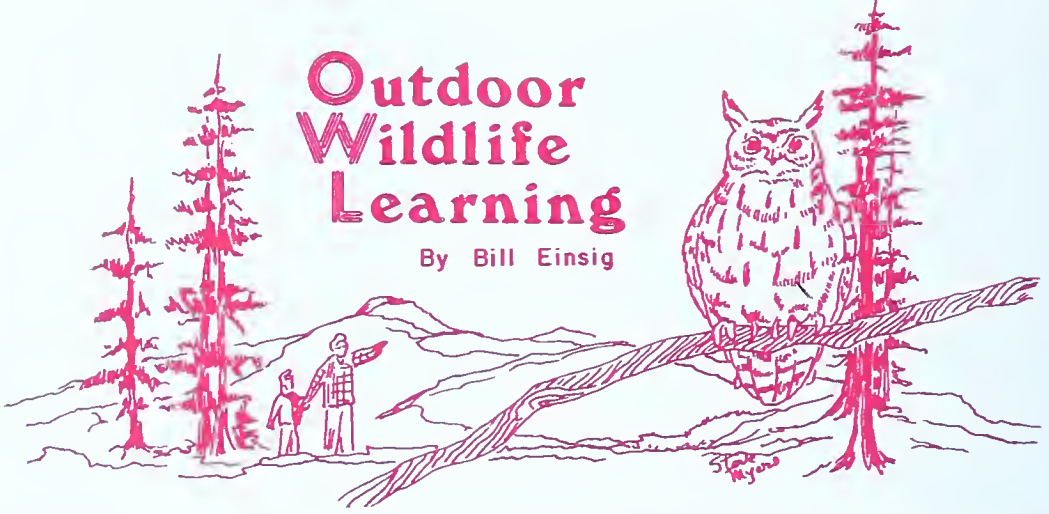
of spot I like to hunt. I hope that's also a compliment that I've picked a gamey-looking place as well. Anyway, instead of having a prearranged, one-man drive, we've had good luck with the "just happened to be moseying through the area I figured you were hunting" sort of deer push. Or you might plan to meet at a certain location in the woods for lunch and arrange to have one hunter get there first and the other put on a drive as he arrives.

I've hunted antlered season to the last day, as well as doe season, and by late afternoon it seems most hunters are on their "futility stands." They know all the deer are in the brush, but no one wants to give up his chance of a shot to go through it. But the one-man drive, to yourself, is also effective. Go through the thicket, and even if you do hear other hunters firing at deer, complete the drive and take a stand on the edge. Deer often circle back, or they may be chased past you by the shooting.

I've never had any shots while I was actually driving the tangles. I was always crawling under or over the bushes and briars and getting twigs in my face. But I could hear deer run. So, if possible, send in the tall ones who can see over it all, and you shorties take the stands.

# Outdoor Wildlife Learning

By Bill Einsig



## Tick Talk

Ticks are amazing animals. Some species attach to three or more hosts for blood meals during their lifetime, while others feed on only one host. Some ticks feed only in the larval stage, and males of some species don't seem to feed at all.

Biologists place ticks in the same class of animals as spiders—the arachnids. Adult arachnids usually have eight legs and two major body divisions—cephalothorax and abdomen. Look at any spider and you'll see the classic body arrangement typical of most arachnids.

Ticks are exceptional. They have eight legs as adults, like all good arachnids, but in the tiny larval form they have only six legs. Larval ticks are commonly called “seed ticks” and are the size of a pin head or smaller.

Ticks also lack the two major body divisions. Instead, their bodies resemble a somewhat flattened oval sac with a tiny head at one end.

### Hard and Soft

Authorities recognize about 1,000 species of ticks worldwide, but admit there are probably several times that number of species still unnamed and unstudied. Most ticks fall into one of two distinct groups—soft ticks or hard ticks. The mouth parts of soft ticks do not project directly forward as do those of hard ticks.

While several species of ticks can be found in Pennsylvania, the most common are the eastern dog tick (*Dermacentor variabilis*) and the brown dog tick (*Rhipicephalus sanguineus*). The brown dog tick can complete its entire life cycle on a sin-

gle dog. It can inhabit kennels and houses but rarely attaches to humans.

The eastern dog tick is the one commonly picked up during a walk in the field. Such a hitchhiker is likely to be a female looking for a high-protein blood meal before laying a mass of several thousand eggs.

### Egg to Adult

The life cycle of this patient tick can stretch to several years. Eggs hatch into tiny, six-leg seed ticks who wait for their first host animal to come their way. Most of these larvae never find a host, though, and die of starvation within a month or two. Larvae that are successful in finding a host feed on the animal's blood through piercing mouth parts, then drop off to the ground.

Larvae molt into nymphs which again wait for a somewhat larger host animal. Mice, rabbits, foxes and other mammals of various sizes are typically bitten by different size ticks. The odds that a nymph will be in the right place at the right time to catch the right size host are not good. Most nymphs die without the second blood meal.

Nymphs that do get that meal feed for some time, drop off and molt to the adult stage. Once again, new adults wait for another host, a still larger one this time, and attach to feed. Mating takes place, in some species at least, while the female is feeding. The male, which may not feed at all, dies after mating.

The female may feed for several days and become engorged with blood. The body stretches to nearly one-half inch in length. Finally, apparently satisfied with its meal, the tick withdraws its anchored mouth parts from the flesh of its victim



and falls to the ground. There it lays 3,000 to 5,000 eggs and then dies, leaving the fate of the species with the next generation of eggs.

## Ticks and Disease

Ticks can carry microorganisms that cause diseases in humans and domestic animals. Texas cattle fever, Q fever, tularemia and hemorrhagic fever are four of the less common ones. Rocky Mountain spotted fever and Lyme disease have received more publicity, even though the actual number of such cases in this state is low.

Spotted fever is caused by an organism that is neither virus nor bacterium. It belongs to the Rickettsiae—a little understood group of microorganisms that have a structure similar to bacteria, but other characteristics more like those of viruses.

Ticks can become disease carriers in two ways, by feeding on an infected host or by having it transferred to them by their infected mothers. An infected female can pass the rickettsiae to her eggs before they leave her body. Even larval seed ticks, therefore, can transmit spotted fever.

More than one tick species can carry spotted fever rickettsiae. There is a tick named for the disease, Rocky Mountain or spotted fever tick (*Dermacentor andersoni*) but other species of *Dermacentor* carry it as well—including the eastern dog tick.

Spotted fever rickettsiae are transmitted to humans while the tick feeds. Authorities believe the tick must be attached and feeding for three to four hours before serious infection is likely.

Symptoms include severe headache for several days, high fever, some nausea and a rash that begins on the extremities—ankles and wrists—and then spreads toward the trunk. The mortality rate of spotted fever if untreated is about 30 percent. With treatment, that rate falls to 3 percent.

Nine cases of spotted fever were diagnosed in Pennsylvania this year. Eight of those occurred in Chester and Berks counties, one in Cumberland County.

Lyme disease was recognized as a distinct disease in 1978 at Lyme, Connecticut. It is caused by a spirochete bacterium carried by the deer tick. The occurrence

of Lyme disease is related to elevation and occurs chiefly in low-lying coastal plain areas, presumably because that is the normal habitat of the deer tick which carries it.

Symptoms of Lyme disease include headaches, malaise, and a rash that spreads outward from the bite site with a central clearing—similar to the spread of ringworm. The disease is rarely fatal, but victims develop arthritis and some heart problems after the infection.

The Pennsylvania Department of Health is beginning to use a new technique to diagnose this recently discovered disease. That agency estimates there were about 100 possible cases of Lyme disease, waiting confirmation, in the commonwealth this year.

## Tick Roundup

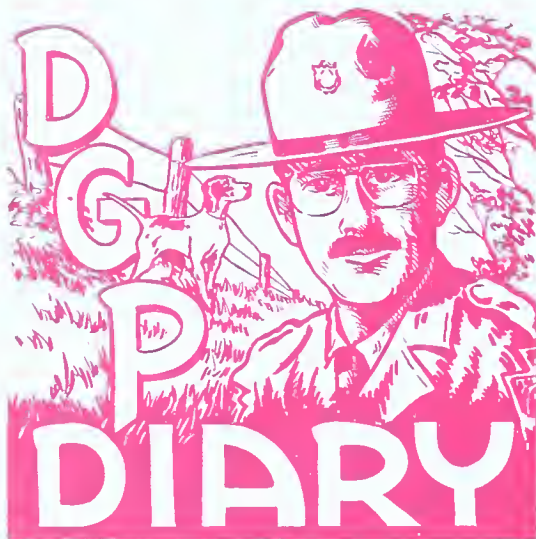
Chances are slim that the next tick which finds its way to your body will be a carrier of any serious disease. However, you should treat all ticks as though they are carriers.

Some authorities recommend the use of insect repellents to keep ticks away. Check hair, ears and neck several times a day while in tick country, and be alert to that telltale tickle of a tick working its way up the nape of your neck, sometimes hours after a hike in the field.

If a tick does become attached, use tweezers to gently pull it straight out. A drop of alcohol usually persuades the tick to loosen its grip. Be careful with the hot match or cigarette technique. It could cause more problems to your hair than would the tick.

Treat the bite wound with an antiseptic and kill the tick by burning or by dropping it in alcohol. Don't crush it with a fingernail because the disease microorganisms could infect you through any small wound on your finger or hand. Handle ticks with tweezers only.

Finally, if a tick does attach to you, and you remove it, don't forget to mention the incident to your doctor if you develop symptoms later on. Spotted fever symptoms—headache, malaise, nausea—are common to many disorders. Telling your doctor about the tick bite simply gives more information for a more accurate diagnosis.



**By Joe Carlos**

**District Game Protector  
Cameron County**

OVER HALF of the month of December will find the game protector enforcing deer hunting regulations as we finish with antlered season and continue the march on through the antlerless and muzzleloader seasons. December will see the beginning of beaver trapping season and the end of the major portion of the hunting pressure. As everyone knows, the Christmas holidays will also fall during this time. Christmas is one season when conservation officers and poachers often share an unofficial truce, each wanting to spend the holidays with his family without the hassles and complications forced upon them by the other group. However, I have spent Christmas Eve on stakeout, shivering for hours in a pouring rain. I have also seen the time when the only holiday greeting I gave to a poacher was a crumpled fender and a citation when he tried to flee. Game protectors and deputies are a dedicated lot when they have reason to believe someone is cheating on the system. December is also the last month that I will have the opportunity of sharing the experiences of Cameron County with you.

*December 1*—The deputies and I are continuing investigations concerning an 11-point bull elk which was shot the previous evening around 9 o'clock in the vicinity of Bryan Hill. A passing spotter noticed the animal lying intact at that time and immediately drove to Emporium and

telephoned me. I in turn dispatched Deputy Bill Olivett, who became the first officer to arrive on the scene. In the short period of time from the dead elk's discovery until the arrival of Officer Olivett, the culprits had returned, cut off the head and hindquarters, removed the tender loins, and vanished. Today we are checking for tracks, searching for cartridge cases, and interviewing area residents.

*December 2*—Almost exactly 48 hours after the killing of the elk, enough pieces of the puzzle began to fall together to act upon. Our investigation, coupled with fine leads contributed by Cameron County Sheriff Jim Fragale and Emporium Borough Patrolmen Mike Yaunt and Mike Neyman, have given us sufficient cause to call District Justice Alvin Brown into the courthouse on his day off to issue five search warrants. As all of the warrants must be served simultaneously, each of the deputies serves one. The two borough officers assist them, along with Al Neyman of the Sheriff's Department and Sam Breniman of the State Police.

In addition to elk meat we uncover illegal deer meat. A total of eight field acknowledgements of guilt are settled. The rifle used in these violations is confiscated and forfeited to the Game Commission.

I am mighty proud of a deputy force, some of whom are in their first year, who can individually be relied upon to serve a warrant and write a citation, both of which will stand the test of court. All of the extra work and training are paying off and our enforcement program is bound to benefit.

*December 8*—It is the evening of our annual Governor's Twenty banquet,\* and the first time in my four-year membership that I have missed the event. I have a good reason not to make the awards ceremony though. Sheriff Fragale, the State Police, and I have been asked to sit in on the formation of Project Elk Watch. A group of citizens, landowners, and sportsmen, spurred by the killing of the 11-point bull and the earlier deer poaching episode, have volunteered their assistance in helping to curb such wasteful slaughter of wildlife. Working independently but under

---

\*The Governor's Twenty consists of the top twenty police revolver shooters in the state, honored for the distinction each year by the governor.



our guidance, they will become the watchful eyes and alert ears reporting any suspicious activity, vehicle descriptions, license numbers, etc., to the proper authorities. They set up patrol schedules known only to their members. Working in pairs and using CB radios, they have instant contact with a base unit in the event that a call for assistance is necessary. In the weeks and months to come they dove-tail nicely with the deputy force.

After the meeting, as I join Deputies John Schatz and Bill Smith already on night patrol, they tell of witnessing an exciting event, a bobcat crossing the Wykoff Run road ahead of them in the headlights of the vehicle.

*December 10*—The first day of antlerless deer season is always rough and circumstances make today more difficult than usual. A lady hunter has shot a small cow elk by mistake and gone to great effort to turn herself in. She and members of her party lead Deputy Brehm, Dick Sassaman and Bill Dobson from the Bureau of Forestry, and me to the kill site. Not only have they dressed out the animal but they stay to assist us in dragging it to the road, thereby sacrificing the remainder of the day's hunt.

*December 11*—Deputy Schatz and I return to the camp of the lady who has shot the elk to collect the fine. As John fills out the paperwork, I can't help but admire this sportswoman's honesty. It would have been easy for her party to quickly leave the area with no one the wiser. There were no other hunters nearby to witness the act or turn her in. Instead, she did the right thing and in a sport that is as male dominated and chauvinistic as hunting, I know it took a lot of courage.

*December 18*—Trooper Ron Luckenbill, Emporium Borough Police Chief James Urey, and I serve arrest warrants today on persons who have either failed to enter a plea on the Game Law citations or have not paid their fines. Some persons believe that if they just ignore us we will go away. It doesn't work that way.

*December 27*—I meet with J. Thomas Conners, vice president and general manager of WTAJ, Channel 10 Television of Altoona, his daughter Cathy, and cameraman Patrick Adachi for a trip on the Game

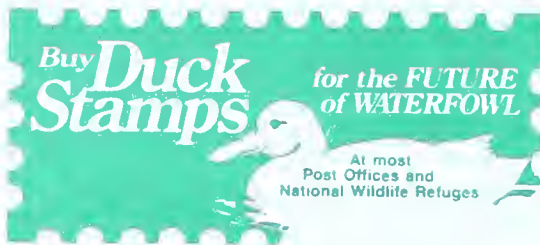
Lands in hopes of shooting some elk footage. Mr. Conners has heard about our big elk case and wants to do a story. We locate two bulls but the distance is longer than we would like and I invite them back for the annual elk survey next month.

*December 31*—Deputy Bill Smith and I end the year by working beaver trap law enforcement and hoping that sportsmen harvest more of these furbearers that have become such a problem in recent years.

During the past year that we've ridden together, we have tracked down, ferreted out, and apprehended scores of deliberate Game Law violators. We have driven 25,646 miles, worked nearly a thousand hours of unpaid overtime, given up many scheduled days off, and spent hundreds—perhaps even thousands—of dollars of our own money on radios, maintaining proficiency with firearms, use of our personal vehicle and equipment, and supplemental education, all in an effort to do a more efficient or safer job for the sportsmen of the commonwealth. We are only human, so we've also made mistakes, and learned to live with them. The mistakes were made in good faith and we have become better officers from the experience. We've also had good times and bad.

Second only to hunting accidents, probably the worst aspect to the job is misunderstanding from those whom we serve. To many, our job seems glamorous and well defined in black and white. In reality, its mostly shades of gray. We know we will never please all of the people all of the time, nor can we pick out any one public from the many publics and cater just to them. Trying to reach such impossible goals can break the fine line between dedication and obsession, or it can cause burnout and complacency. We prioritize our efforts and achieve the maximum impact, working with finite amounts of time and resources.

Each area is unique, but I like to think that any other officer coming into Cameron County would diagnose the special problems and needs of this area in pretty much the same proportions as I have. Because we are all individuals, the way we administer those prescriptions will always be different, although directed toward the same goal. In carrying out his job, the



game protector, perhaps more than any other public official short of the executive director or the president, is subject to constant criticism. For instance, when a police detective investigating a murder—a felony crime—has his eight hours in, he goes home and forgets the job until his next shift. But the game protector is expected to do without rest for months and be on call 24 hours a day, 365 days a year, in an effort to curtail summary violations which are looked upon by most courts as the least severe of all infractions.

I wonder how many of those who criticize us go back to the factory, office, or shop at the end of each day to donate two or four hours of overtime. If we stop at home on Thanksgiving Day for a bite of turkey with the family, we are apt to be accused of not doing our jobs. Yet if we apprehend that same hunter a few hours later, spotlighting after midnight, carrying a loaded gun in a vehicle, driving on a closed road, or failing to tag his deer, he is the first to tell us that we "ought to be out there catching the real outlaws." If we transfer a nuisance bear out of the county, we are denying the opportunity to hunt that piece of game to one man, whereas his neighbor down the block may be screaming bloody murder because all of our traps are tied up in cornfields, where real economic damage is occurring, and can't service his complaint about bears tearing up garbage.

If a sportsman drives by the house during the day and sees our vehicle parked out front, he may not know that we didn't get in from night patrol until 4 a.m. or that perhaps we are spending a 12-hour day in front of the typewriter catching up on reports. He will be the first to complain to his buddies that we should be out filling feeders or fruitlessly attempting to hunt down wild dogs. And then, of course, there is the \$8.50 Ph.D. This is the guy at the sportsmen's club who has had a little too much "Old Loud Mouth" and proceeds to tell us that all we need to do to have better deer hunting is set fire to the woods or

spend a few million dollars of the money we don't have to spray for gypsy moth, plant corn strips out in the forest, or import deer from Michigan. I wish the solutions were that simple. I wonder if these same people question the diagnoses of their physicians or argue constitutional law with their attorneys. Why do they think that game management is any less of a science? I have not become calloused by these things and try to look upon them instead as challenges to be met.

The rewards of the job far outnumber the negative aspects. For instance, the knowledge that our efforts are making the sport of hunting safer and more ethical is very satisfying. So is the fact that the majority of sportsmen back and appreciate what we are doing. An example of the cooperation we receive happened a few years back on the Game Lands when a hunter saw an individual kill a large bull elk. The sportsman became so enraged that he confronted the shooter, taking down his license number and name and even attempting to disarm him. The newly formed Elk Watch Committee is another fine example. And there is the knowledge that all the little bits and pieces of data that we contribute to the biologists, such as deer reproductive rates, reporting rates, tagging bears or radio collaring elk, and making woodcock and waterfowl surveys are all useful in managing the species. And there is the satisfaction in seeing some of our suggestions for seasons, bag limits, rules and regulations being enacted or adopted.

Climbing down off my soap box for a moment I'll try to answer the question that many have asked—what am I going to do with all my free time now that I won't be writing DGP Diary. For starters, I hope to allocate a little more time to family and home life. As always I will be recruiting, training, and equipping one of the best darn deputy forces in the commonwealth. I will continue pursuing the deliberate violator of the Game Law who would selfishly steal or waste wildlife that belongs to all citizens of the commonwealth. And I hope I can be successful in changing some attitudes about the role of the game protector. I am working on a book on combat pistolcraft, and I hope to pick up a master's degree. Then in a few years, if the Commission sees fit, perhaps we can ride together over the mountains of Cameron County for another year.



**I**F YOU WANT a classic bolt action rifle of exceptional workmanship and reliability, you may find yourself, as I did, turning to one made more than two decades ago: the pre-1964 Winchester Model 70.

Prices for these guns reflect their quality and the quirkiness of gun collectors. As a benchmark, a brand new 1985 Model 70 costs something over \$400. A Model 70 made before 1964 and in good condition can fetch twice that amount. An immaculate pre-64 in an odd caliber—one for which few individual guns were chambered—may bring over \$5000. And the action alone, in brisk demand for custom rifles, goes for \$250 to \$500.

Early this year I sold my old rifle and started looking for a new one. I wanted an “all-around gun,” to use on all kinds of game from deer to elk. My friend Jeff Swabb, a gunsmith, became technical consultant on the quest. Together we visited gun shops and gun shows across the state. It was midsummer when the search finally paid off.

The Model 70 story starts in 1925, when Winchester introduced their first modern bolt action rifle, the Model 54. Eleven years later they brought out the Model 70, which corrected several design features in the 54. The Model 70 cost \$61.25, and it was an innovative firearm.

The rifle's safety swings on a horizontal plane, where it doesn't interfere with a telescopic sight. The safety has three positions. Pushed forward, it allows the gun to fire and the bolt to chamber cartridges. Set in its middle position, it locks the firing pin while allowing the bolt to operate, thus remaining engaged at two crucial times: when a live round is being chambered and when an unfired round is being removed. Thumbed all the way back, the safety immobilizes both bolt and firing pin. This type of safety, found on few other sporting rifles, may be the safest ever devised.

The pre-64 Model 70 has a smooth

# Thornapples



*Chuck Fergus*

action designed to feed, extract, and eject cartridges with speed and certainty. When the bolt face strips a fresh cartridge from the magazine, the cartridge's rim slips behind the extractor claw on the bolt. This claw grips the cartridge securely. The cartridge cannot fall out of the loading port, and if bolt direction is reversed before the round is fully seated, the cartridge is pulled along and ejected.

Many other rifles work differently. In those having the extractor fitted into the bolt face, the feeding cartridge is simply pushed ahead of the face, and the extractor doesn't grip it until the round is fully chambered. If the bolt is pulled back for any reason before the extractor engages the cartridge, it leaves the round partly chambered or sitting in the loading port. Then if the bolt is cycled again, it tries to chamber another cartridge along with the first. The result is a jam. You don't want to jam your action in the heat of trying to put a second bullet into a fleeing animal.

## Other Qualities

The pre-64 Model 70 has other endearing qualities: An excellent adjustable trigger. A bolt designed for low scope mounting. Good wood carefully fitted to the metal, for an appearance that is rugged and graceful at the same time.

A good-looking, smooth performing

rifle, the Model 70 sold well. Winchester dubbed it "the Rifleman's Rifle," and the name stuck. Wrote Jack O'Connor in *The Rifle Book*, "All in all the Model 70 was an honest solid rifle with an excellent action."

But times and manufacturing methods changed.

Unfortunately, the original Model 70 did not lend itself to mass production. The receiver (the part of the action that houses the bolt) was machined from a massive bar of steel in a sequence of 75 hand operations. The raw bar weighed 120 ounces; the finished product, 19.3 ounces. In comparison, the Remington Model 700 receiver starts as a 64-ounce bar of steel and ends up as a 15-ounce finished piece; the Ruger Model 77 begins as a 20-ounce cast billet and weighs 16.3 ounces finished. Making a pre-64 Model 70—machining the receiver and other parts, combining them in the action, mating wood to metal, finishing the stock—took many hours of skilled labor. The gun, it has been esti-

**NICKNAMED "the Rifleman's Rifle," the early Model 70 Winchester gathered a devoted following, and Fergus knew he wouldn't be happy until he had one.**



mated, would cost over \$1000 to make today.

From the 1950s on, Winchester kept raising the Model 70's price and making minor changes to cut costs. By 1963, the last year of production, the basic rifle sold for \$139.

Still, Winchester was not making enough profit. Wholesale manufacturing changes were needed. In 1964 they replaced the old design with a new Model 70.

### Extraction Changed

The famous three-position safety would remain. The extraction system was changed—now the bolt shoved the cartridge ahead without gripping it, as in numerous other rifles. Many small parts were cast to save machining time, and the process for making the receiver was simplified. The wood on the new gun was plainer, with mechanically pressed checkering. The redesign did not sit well with the faithful. Wrote O'Connor: "At the first glimpse I like to fell into a swoon . . . I was surrounded by the designers and by Winchester brass. I told them the creation would not sell, that it was one of the ugliest rifles I had ever seen."

The new Model 70—which many feel should not be called a Model 70 at all—has been refined and improved since that bleak hour in 1964. It is in fact a slightly stronger action than its predecessor, because the face of the bolt encloses the head of the seated cartridge more fully. The new extraction system rarely causes feeding problems. But the new Model 70 has never made hunters forget the original.

Although demand is high for pre-64's, many of the old guns are still floating around. There is a range of styles and calibers to choose from. The standard Model 70, a featherweight version, a heavy varmint model, a carbine, a super grade, and a target gun. During the quarter-century it was produced, the original Model 70 came in various calibers from the tiny 22 Hornet to the ponderous 458 Winchester Magnum, with many old standards in



between, including the 243, 257 Roberts, 270, 7x57mm, 308, 30-06, 300 H & H and 375 H & H Magnums. There was a sprinkling of odd chamberings, like the 250-3000 Savage, 7.65x53mm, 300 Savage, 35 Remington, and 9x57mm—guns that make collectors quiver.

Many people collect. I heard of a farmer who, when he heard Winchester was changing the Model 70, bought up several dozen in the more esoteric calibers and stashed them away, unfired, in their original boxes; now, if he needs a new pickup truck, he sells a few guns. Other collectors spend their weekends at gun shows, looking for that one featherweight to round out their collection, or that carbine in an odd caliber, or simply a better-condition rifle to replace one already on the rack. Some people fill basements with Model 70s.

The standard pre-64 has a 24-inch barrel and weighs, with scope, sling, and a magazine full of cartridges, something over 9 pounds. For many hunters this is too heavy for comfort. In 1952 Winchester introduced a featherweight version, with a slimmer, shorter barrel—22 inches—and aluminum for the floorplate and trigger guard instead of steel. That Featherweight weighs 6½ pounds. With scope, sling, and cartridges, it comes to 8 pounds or less, and its lightness makes it excellent for carrying in a saddle scabbard on horseback, or on foot in mountainous terrain. The Featherweight came in six calibers: 243, 264 Magnum, 270, 308, 30-06, and 358 Winchester.

### The Gun I Wanted

This was the gun I wanted: a Featherweight in caliber 270.

Searching for the gun, Jeff and I went to three gun shows, two small ones in Washingtonville and Bald Eagle (held in a grange and a firehall, respectively) and a monstrous affair at a convention center in Pittsburgh.

At gun shows you pay your dollar at the door, they ink-stamp the back of

## The Wingless Crow

*The Wingless Crow* is a 200-page hardcover book made up of thirty-three of Chuck Fergus's "Thorn-apples" columns which have appeared in *GAME NEWS*. Wonderful reading for your own collection or as a gift. Order from the Game Commission, Dept. AR, Box 1567, Harrisburg, Pa. 17105-1567. \$10 delivered.

your hand, and you go in and start filing past tables. On the tables you can find almost anything. Antique ammunition. Knives. Belt buckles. Holsters. Scopes. Nazi regalia. Portraits of Kaiser Wilhelm. T-shirts. (My favorite showed a man with a smoking pistol standing over a defunct creature that vaguely resembled an alligator with horns and a forked tongue, saying, "I don't know what it is, but I killed it!")

### Thousands of Guns

The sellers sit behind the tables. The guns all point inward, making the owners look as if they are under guard. Thousands of guns. Guns in sparkling condition, guns that look like they've been used as oars, hunting rifles, flintlocks, pistols, saddle carbines, shotguns. I looked at guns until I was sick of them. I saw a good many Model 70s, a few Featherweights, and no 270s.

One day Jeff and I drove to Shuman's Gun Shop in Newville, Cumberland County. We felt like two kids in a candy store. Where the average gunshop usually had one or two pre-64s, Shuman's had a rack 20 feet long filled with them. The guns were in mint or near-mint condition. The prices corresponded. I hefted a nice 30-06 Featherweight that carried a \$675 tag. There were no 270 Featherweights on the rack, but I learned from Byron Sterling, the man behind the counter, that they command an even higher price. "A really fine one

just out of the cradle," he said, "with an aluminum buttplate and good checkering, will go for close to \$1000."

Too rich for my blood. I'm not a collector at heart, and resale value does not mean a great deal to me; what I buy, I plan to hang onto. I wanted a rifle to use, to carry in the rainy Pennsylvania deer woods, lug into the snowy Rocky Mountain high country for elk, maybe even take to Alaska for that long-dreamed-of sheep hunt.

One day I was in Harrisburg visiting GAME NEWS editor Bob Bell. He told me about a 270 Featherweight that a friend of his had seen in Gib Gault's Sporting Goods Shop in nearby Marysville. The gun hadn't been there when I'd looked a couple of months earlier; that day Gib said to me, "If you laid a pre-64 on this counter next to a brand new Model 70, I'd take the

new gun every time." Then he admitted that the gun he always hunts with is a pre-64.

I went and saw the rifle. It was definitely a pre-64. The bore and the blueing looked good. The bolt had been jeweled—a procedure that helps keep the metal's surface lubricated with oil—and someone had added a wood fore-end tip and a rubber recoil pad to the stock. While these modifications didn't harm the gun, they reduced its value for a collector. The owner, for whom Gib was selling the gun, was asking \$450. The price included a 3-9x Leupold scope and an extra fiberglass stock.

### Quick Call

I gave Jeff a quick phone call. He advised me to go ahead and buy the gun.

When I got it back to his shop, Jeff went over the rifle thoroughly. The trigger needed tuning, and Jeff fixed it. We went out to the bench. The gun felt good to shoot; recoil was not unpleasant. We sighted it in and got a decent group.

The stock isn't the best, but I can stand it for the time being. Actually, an imperfect stock fits into my plans.

If the rifle turns out to be accurate—and most pre-64s are—I want to get new wood for it. A piece of French walnut with a rich glowing grain, a blank of California English with ample figure, or some topnotch American black walnut. I've started looking again, this time for wood that's fancy enough to please my eye, plain enough to give strength and stability.

Jeff does fine stockwork, and I plan to let him work his craft. By next fall I may have a classic all-around rifle, a gun to use as long as I hunt, a gun to hand down to another hunter if one comes in my line.

In the meantime, I have a rifle that needs getting used to. I want to work up an accurate load and do a lot of shooting to get the feel of the trigger, bolt, and safety. After all, deer season is just around the corner.

## GAMEcooking Tips . . .

### Venison Au Naturel

Venison steaks (1 to 2 pounds)

- 1 large onion
- 1 cup hearty red wine
- 4 tablespoons butter or margarine (one-half stick)

Cover fresh or frozen steaks with red wine and a large strong onion, sliced. Allow to marinate four to six hours. Cook quickly in melted butter with the wine-soaked onions. Reserve wine. Remove steaks to heated platter. Return marinade to pan and stir until just boiling. Pour over steaks and serve.

*Note:* This is my son's special recipe. He whips these up in a flash and likes his rare. I find venison difficult to judge in degrees of doneness. It turns very quickly from rare to well-done. If you want rare steaks, give these your undivided attention. A good rule-of-thumb for half-inch steaks is 1½ to 2 minutes per side for rare. Easy. Serves 4

—FROM WILD GAME COOKERY  
BY CAROL VANCE WARY



To become a better archer . . . .

# From Print To Practice

By Keith C. Schuyler

**T**HERE ARE basically two reasons to read. One is to become better informed. The other is to be entertained. Most of the better books provide a combination of information and anecdotes to illustrate points being made and give the reader the best of both worlds. Actual photographs can do much to bring all information into better focus.

Although there is nothing to take the place of on-sight training for an archer, being able to absorb oneself vicariously in experiences of an author imprint ideas and suggestions that can be of later help to the reader. Those who write, read, for no individual has all the answers. Comparing notes with those of like bent can confirm or discourage ideas intended to be shared with others through the printed word.

Among my most prized possessions, both literally and figuratively, are some sixty-five books by and about archers and archery, beginning with the complete works of Roger Ascham. Although my set is but a reprint manufactured in 1864, it includes Ascham's *Toxophilus*, the first definitive work on archery ever printed in English—published in 1545. Remarkably, Roger's instructions on how to shoot the bow are as valid as when written 4½ centuries ago.

It is interesting that even my set was printed four pages to a sheet of paper which was then folded and bound into the book. Consequently, to read the finished product, it was necessary to cut the edges of each page to reveal the print.

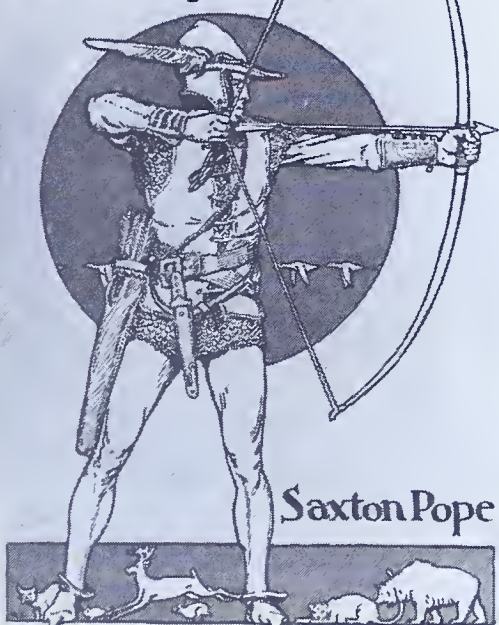
*Toxophilus*, which means love of the bow, had prompted some 300 more works on the subject by 1894, according to *Archery*, a title that has served to identify many books on the subject.



**ARCHERY BOOKS**—either current or from days long gone—contain tradition and adventure as well as practical information for those willing to spend time with them.

Despite the fact that bows and arrows have been with us for what some believe to be as long as 50,000 years, there was a long drought of books about them when firearms became favored as an arm for both war and hunting. Killing was a serious business throughout a world in which, to a large degree, it was a case of kill or be killed. And, until widespread domestication of animals for food and the improvement of farming methods, a person's very existence frequently depended upon his ability to kill wild animals. On all continents, Australia excepted, where archery was the mainstay, games were invented to

# HUNTING with the BOW & ARROW



**SAXTON POPE's book is one of the most famous in the field. It tells of his personal bow hunting adventures with Arthur Young.**

amuse both boys and men to maintain their interest in and abilities with the bow and arrow. The English are generally credited with keeping interest alive in archery as a pastime and for competition. Although there was some hunting in Europe with the bow after gunpowder took over, most of it was pure poaching.

It was a book, *The Witchery of Archery*, which revived the sport in this country after even the Indians had largely given up the bow for the gun. Written in 1877, the book covered the exploits of J. Maurice and Will Thompson after the Civil War during their rehabilitation. As rebels, they were denied the use of guns. They took to the bow, which provided their main sustenance during the two years needed for Maurice to overcome to a degree a gunshot wound in the chest. In 1878, a group of interested archers called on the Thompsons, and from

this meeting the National Archery Association of the United States was born.

However, back on September 3, 1828, The Club of United Bowmen, oldest archery organization on this continent, was founded. History of this target-oriented club, still active, was duly recorded in the book, *The United Bowmen of Philadelphia*, written to commemorate the 125th anniversary in 1953. Dr. Robert P. Elmer, who provided the introductory chapter for this book, also wrote two books, *Archery* and *Target Archery*, which chronicled the history and development of archery in the early part of this century.

Saxton Pope wrote of his hunting experiences with Arthur Young, and both are immortalized in Pope's book *Hunting With the Bow and Arrow* and in the hunting club which bears their names, the Pope and Young Club. This is bow hunting's companion organization to gunning's Boone and Crockett Club. In his book, Dr. Pope told of his association with Ishi, the last wild Yana Indian found on this continent. The two were frequent companions before Ishi's untimely death from white man's tuberculosis.

Ishi's remarkable contribution to the primitive history of Indian archery led to the book *Ishi in Two Worlds*, by Theodora Kroeber, which enlarges on Pope's information.

## Many Others

These and many others, such as Howard Hill's *Hunting the Hard Way*, preserve the happenings in archery before World War II when adaptations of the English longbow were challenged only by the ancient crossbow. This arm, developed primarily for battle, has its own history best chronicled by Sir Ralph Payne-Gallwey's *The Crossbow, Mediaeval and Modern Military and Sporting*.

Despite the hundreds of books written during the era of the longbow and Asiatic bows, introduction of the recurve bow as we know it today took



over much of archery following World War II. Some, such as Fred Bear, who wrote *Fred Bear's Field Notes* and *Fred Bear's World of Archery* have had active archery experience during the heyday of all bows up to the current cam adaptation of the modern compound which all but supplanted the recurve bow in the early 1970s. And, for the record, I must subjugate modesty to include two personal books, *Archery, From Golds to Big Game* and *Bow Hunting for Big Game*, which collectively cover archery during periods of the three phases of bow as well as arrow development. The stages of development of the arrow itself from wood to plastics and aluminum alloys is a story in itself.

Although much of what has been written about shooting methods is as valid today as back in Ascham's time, almost a plethora of books is being printed on the subject. Yet, the adaptation of bow shooting to various hunting activities has encouraged more in depth research into various facets of the sport. Examples are Ken Brown's *Guide to Bowfishing* and Dutch Wambold's *Bowhunting for Deer*.

Two factors work in favor of current chronicles of archery in its many aspects—excellent cameras and fine photo reproductions on paper. Authors and photographers, sometimes the same individual, are able to provide both word pictures and photographic reproductions that will leave posterity a more vivid record of what is happening today.

Working against a more widespread distribution of hard cover books is their cost. This problem is alleviated somewhat by soft cover printings of new books and reprints of hard covers which sell at substantially lower prices.

If you want some of the classics, the price will be many times the original cost of the first edition—if you are able to obtain them. Reprints, which attest to the value of the originals, are still much higher in price than when the books first hit the market.



**COVER PLATE** of book published by The United Bowmen of Philadelphia to commemorate the still-active club's 125th anniversary in 1953.

By far the greatest number of archers are bow hunters. However, as has been repeated here many times, the proper place to begin is on the target line, regardless of your future intention. There is little difference in the basics of shooting, whether with a longbow, a recurve or a compound. So searching the views of the past masters has a practical application as well as a return to the romance that preserved archery for the present generation and those to come. As you leaf through the sometimes brittle pages, do so with respect for the love of the sport that prompted someone to put his thoughts in print with the hope that you, too, would help to preserve it for all time.

You can give a serious archer no finer Christmas present than a book about his sport. A wide range of contemporary books is available. With luck you might even find one of the yellow-paged classics that will only continue to increase in value.

You can also add to or start your own library. If you let this column lie in the right place, someone else might help you get started.

# You and Your Deer Rifle

By Don Lewis

Photos by Helen Lewis



**CHARLEY BOYER, here checking a deer scrape, has found the lever action M99 Savage an excellent choice for whitetailed deer and black bear.**

**“SHUCKS,** it wouldn't be deer hunting for me if I didn't have a lever action,” is a remark I just can't forget.

I can't recall the details, but the comment carries a message and is filled with meaning when properly analyzed. The hunter who made this statement was sincere. He summed up his entire deer-hunting philosophy in one simple sentence. Although his face and name have departed from me, those fifteen words are imbedded in my mind forever. He could have been speaking for all deer hunters. He brought into clear perspective the cor-

relation between the deer hunter and his rifle which is the heart of deer hunting.

The rifle is more than just an instrument used to bring the hunt to a successful end. While it is an inanimate object without the ability to communicate, it should be a very personal thing with the deer hunter. In one sense, the hunter and his rifle should communicate. No words will pass between them, but there is bond. Its physical configuration, caliber and cartridge speak clearly to the owner, and successes on the range and in the woods are assuring voices from the past. There doesn't have to be any dialogue; the hunter and his rifle are a team.

I'm often asked about the best rifle for deer hunting. I think this question pertains more to the cartridge than the brand or type of rifle. The person asking the question is expecting a simple direct answer. Maybe he is waiting for me to say that Brand X chambered for the 290 Wallapaloozer cartridge tops the field. To make such a statement would only be expressing my personal opinion. For sure, certain models of rifles have led the pack down through the years. The Model 94 Winchester 30-30 probably accounted for more deer than any other model or cartridge. But famous as this model was and still is, other gun manufacturers have had very famous outfits in Pennsylvania's deer woods.

Remington's contribution is the slide action, beginning way back with the Model 14A in the 25, 30 and 32 Remington calibers. The Model 14 was replaced with the Model 141 in 1937. Apparently, the 25 caliber was dropped, but the famous 35 Remington was added. It was the fastest action in Pennsylvania's deer woods



for decades. The M141 was expensive to build, and bit the dust around 1950. Shortly thereafter, the Model 760 pump, which incorporates a detachable magazine and is chambered for the powerful 30-06 cartridge, made its debut.

This was a move tens of thousands of deer hunters had been waiting for. First, previous slide action big game rifles had been chambered for lower pressure cartridges. It was believed for a long time that a pump could not be built strong enough to handle the 30-06. Remington designed the 760 with a rotary multiple-lug breechbolt. This is similar in design to heavy ordnance guns. The bolt and barrel are locked together securely, guaranteeing constant headspace.

The M760 not only gave the slide action fancier a rifle strong enough to handle the 30-06 and 270 cartridges, but it offered amazing accuracy for a slide action rifle. During my sight-in days, dozens of 760s shot very tight groups, not only with the 30-06 and 270 rounds but also with other conventional deer-type cartridges.

Today's deer hunter moves from spot to spot. The 760 (replaced several years ago with the Model Six) with its detachable magazine fits nicely into this style of hunting. It takes but a few seconds to remove the magazine and slide the action back to remove the cartridge from the chamber. This is certainly more convenient and safer than cranking them out one at a time.

### The Famous M99

Another oldster is the Savage Model 99. This famous lever action really goes back in time. Originally introduced in 1899 in the 303 caliber, it was replaced in 1922 by the Model 99A chambered for the 300 Savage, 303 Savage and the 30-30.

During the 1930s, the 99-G take-down rifle was offered with a 410-bore shotgun barrel that was interchangeable with all calibers.

The Model 99 is always associated with the 300 Savage load and the fa-



**IN COMMON WITH** countless other Pennsylvania hunters, Ray Johns finds the slide action 760 Remington perfect for fast work on thick-cover whitetails.

mous 250-3000 cartridge. The 300 has stood the test of time, much like the 30-30 and 30-06, but the 250-3000 was a controversial cartridge from the day of its introduction. With its 87-grain bullet, the 250-3000 was the first factory offering to break the 3000 fps barrier. That was a real accomplishment in 1915.

Despite its adverse publicity and lack of acceptance by the majority of deer hunters, the 250 Savage, as it is now called, has a slight edge over cartridges such as the 30-30 and the 6mm's. This would be especially true for hunters in the western states. The Pennsylvania hunter of 60 or 70 years ago was faced mostly with close range shots in heavy brush and timber. With all its accuracy and speed, the 87-grain bullet didn't generate much enthusiasm in the Keystone state. I might add that the 250 is an ideal choice for deer hunters who are concerned about recoil; it doesn't kick much.

The 120-grain 257 bullet can be used in the 250-3000, but it's wiser to stick with 100-grain slugs as the 1 in 14-inch twist is too slow to stabilize the 120-grain bullet.

Marlin, much like Winchester, has always been lever action oriented. One of their most popular early models was



**NOPE, the rack isn't impressive, but the chops were great, and Lewis did the job with his Ruger M77 308, a slick-handling choice in this short-barreled version.**

the 1893 chambered for the 32-40 Ballard & Marlin and the 38-55 Ballard & Marlin. The Model 1895 was chambered for the 45-90-300 Winchester cartridge. It was 45 caliber carrying 90 grains of black powder behind a 300-grain slug. Apparently, top velocity for this cannon-type slug was around the 1500 fps mark. Velocities for smokeless powders run up to 1900 fps.

The 336 ER (Extra Range) is Marlin's latest offering. It's chambered for the powerful 356 Winchester load. Their Model 336CS can be had for the 30-30, 35 Remington or 375 Winchester.

The Marlin 336 has been a tough competitor for Winchester's Model 94 lever and has one distinct advantage—the 336's ejection port is on the side, allowing a scope to be mounted directly over the action. Winchester's original M94 design had top ejection. A scope had to be mounted on the side of the action or ahead of it. Neither made the neatest looking mount, but they allowed the Model 94 to take advantage of a scope's benefits.

Winchester solved this recently by

introducing their new Model 94 AE Model (Angle Eject). The new angled ejection system tosses the empty cartridge away from the shooter's line of vision and allows the scope to be mounted directly over the receiver. Mounting a scope on the left side of the old model was never easy (I mounted several on the right side), and certainly didn't add to the cosmetics of the famous 94, but it served the purpose. The angle eject system sounded the death knell for the old 94, but it's a welcome change. The new Winchester 94 AE looks classy with the scope sitting neatly on top of the receiver.

The 30-30 cartridge dates back to 1895 when Winchester introduced it in their Model 94 lever action rifle. The original loading used 30 grains of smokeless powder behind a 165-grain bullet. Muzzle velocity was just under 2000 fps.

Down through the years, a variety of brands and models have been chambered for this famous deer cartridge. Even in this day of the magnum cartridge, the 30-30 still ranks high on the deer hunter's "best cartridge" list. I suppose its phenomenal success comes about because it has all the requisites for a top whitetail deer cartridge and it doesn't roar like a magnum or kick like a mule.

For all practical purposes, the 30-30 is strictly a deer and black bear cartridge. It is not super accurate nor does it handle bullet weights below 150 grains with any real degree of accuracy. Probably its best bullet is the 170 grain.

I have gone through a partial list of cartridges and rifles that have intrigued Pennsylvania deer hunters for decades. Others such as the Model 70 Winchester in the 270 and 30-06 chamberings hold honored spots with thousands of deer hunters. Ex-military rifles such as the Enfield, Springfield and Krag were very popular before World War II. After that war, the German military 8mm Mauser was brought back by thousands of servicemen. It is still common in the deer



woods, and the M98 Mauser action is still in demand by wildcatters and varmint rifle builders.

What are the requisites for a good deer outfit? The answer appears fairly simple: adequate power, proper bullet weight, and the type of action that appeals to your personal tastes. Simple as this may sound, it's a lot more complex than it seems.

The answer to the above requirements doesn't come overnight; it takes a few years for the picture to come into focus. Also, we must buy what is right for us instead of blindly following the advice of others. We should weigh the advice from qualified people and our hunting companions, but ultimately

the decision should come from inside—not outside. This is not always easy, but it's the right thing if you really want the deer outfit that's best for you.

Which rifle or cartridge is best? That question never has been answered and never will be. The best rifle and cartridge for you may not be the same one your hunting partner would pick, but that's not important. Choosing a deer rifle and cartridge is somewhat like picking a mate; it's a very personal matter. What is best for you is really what is best for you. With that ambiguous statement, I will leave the matter of you and your deer rifle up to you.

---

## GUNnews for Shooters . . .

**Gold Medallion bore cleaner quickly and easily removes lead, copper, carbon, and powder and plastic residue, and is non-toxic, according to the manufacturer, United States Products Co., 518 Melwood Ave., Pittsburgh, Pa. 15213-1194.**



**Case-Gard Shooter's Tool Box is constructed of high impact plastic, has lift-out tray and compartments to carry numerous small items needed by shooters on the range or in the field. Snap-Lok latch. MTM Molded Products Co., P.O. Box 14117, Dayton, OH 45414.**

# *In the wind*

bob mitchell



The future of trumpeter swans in North America appears more secure, thanks to several groups including the Ontario Ministry of Natural Resources and the Canadian Wildlife Service. For the past four years, mute swans have been used as foster parents to raise trumpeters in the wild, and pen-raised trumpeters also have been released in the wild to bolster natural populations. These birds have been spotted on wintering areas in Lake Ontario and in Maryland. This restoration program has been so successful that Michigan and Wisconsin are planning similar ones.

Thirty-six wild turkeys obtained from Vermont were released in Delaware in January 1984 in an effort to reestablish turkeys in the state. A year later, it was apparent the birds were adapting. They were feeding regularly on waste corn and soybeans—grains they had never seen—and they were remaining within five miles of the release site. Most promising, however, is that after their first nesting season there, 12 broods containing a total of 93 poults had been reported.

The Wisconsin Department of Natural Resources is providing matching grant-in-aid funds from their Federal Aid apportionments to local governments, educational institutions and other organizations for the purpose of building shooting ranges. To receive grants, sponsors must agree to provide live firing for hunter education classes for at least 15 years. Ranges proposed for major metropolitan areas will receive first consideration, followed by those where ranges for hunter education don't already exist within a 20-mile radius.

The Virginia Commission of Game and Inland Fisheries is attempting to establish a ruffed grouse population in the tidewater region of the state. Plans call for up to 60 birds to be captured west of the Blue Ridge Mountains and released on a wildlife management area in the eastern part of the state.

A peregrine falcon, raised in captivity at the Wainwright Research Facility in Edmonton, Alberta, Canada, was released to the wild on June 13, this year. Less than two months later it was rescued a thousand miles at sea, in the middle of the North Atlantic, by the crew of a Liberian-registered tanker. The peregrine had landed several times on the ship to eat birds it had caught, but after several day's absence, it returned exhausted, dehydrated and starving. Crew members gave it water from an eyedropper and live birds they captured. The bird was taken to a raptor rehabilitator when the ship docked in New Jersey and is reportedly well on its way to a full recovery.

An initiative has been proposed in Washington to increase the state's sales tax  $\frac{1}{8}$  of one percent, with the proceeds earmarked to maintain and improve fish and wildlife habitat. According to the Wildlife Management Institute, the Washington Game Commission supports the initiative, as the \$38 million a year it's projected to raise is needed to adequately manage and protect the state's wildlife resources. If enacted, the funds will be used initially to purchase 400,000 acres of land for wildlife habitat development.

Prior to a controlled hunt to reduce the deer population on the 3600-acre Yale Forest in Connecticut last year, protestors from two anti-hunting groups claimed that the deer on the forest were healthy, and that all 230 hunters permitted to hunt on the forest would take a deer. In addition, immediately before the hunt, group members spread human hair at heavy deer crossings to disrupt the hunt. However, the hunt was conducted without any problems. Thirty-five deer were taken (two short of the 37 biologists had anticipated), the male fawns, it was discovered, weighed 28 percent less than the statewide average, and the human hair had no effect whatsoever.



# Annual Index

By Betsy Maugans

## ANOTHER VIEW

Another View —  
Linda Steiner ..... JUN-DEC

## ARCHERY

Bowhunting Ethics—Keith C. Schuyler .. JAN  
Color Combinations —  
Keith C. Schuyler ..... FEB  
A Career in Archery —  
Keith C. Schuyler ..... MAR  
Reading Range—Keith Schuyler ..... APR  
Top Tackle Test—Keith C. Schuyler ..... MAY  
Keep It Straight—Keith C. Schuyler ..... JUN  
Summer Scouting—Keith C. Schuyler ..... JUL  
And His Three Sons—Keith C. Schuyler . AUG  
Switch Shooting—Keith C. Schuyler ..... SEP  
All-Day Deer Hunts —  
Keith C. Schuyler ..... OCT  
Bear Hunting Coverup —  
Keith C. Schuyler ..... NOV  
From Print to Practice —  
Keith C. Schuyler ..... DEC

## CONSERVATION EDUCATION

Outdoor Wildlife Learning —  
Bill Einsig ..... ALL MONTHS  
In the Wind—Bob Mitchell .. ALL MONTHS  
Young Artists Page ..... ALL MONTHS  
Annual Report 7/1/83 to 6/30/84 ..... JAN  
Needed—Hunting License Fee Increase —  
Peter S. Duncan ..... FEB  
DER and PGC Working Together  
For Wildlife—Albert Schutz ..... SEP  
Wildlife In School—Dean Fromm ..... SEP

## COOKING

I Hate Venison—Michael Raykovicz ..... AUG

## DGP DIARY

DGP Diary—Joe Carlos ..... ALL MONTHS

## DOGS

Thoughts On Your First Gun Dog —  
John D. Taylor ..... MAR  
This Dog's Gettin' Older—Nick Sisley ... MAY

## FICTION

The Affliction—Paul A. Matthews ..... AUG  
“You Done All Right Boy”—  
Paul A. Matthews ..... NOV

## FROM THE FIELD

The Little School That Could —  
Fredrick G. Weigelt ..... JAN  
Input From Field Officers —  
Joe Carlos ..... APR  
The Ringneck Situation —  
Dick Donahoe ..... JUN

## GAMECOOKING TIPS

GAMECOOKING Tips —  
Carol Vance Wary ..... JUN-DEC

## GUNS AND FIREARMS SAFETY

Year of Decision—Don Lewis ..... JAN  
Beat the February Doldrums —  
Don Lewis ..... FEB  
The Trade-In—Don Lewis ..... MAR  
Some Thoughts On Bullets —  
Don Lewis ..... APR  
The Varmint Rifle—Don Lewis ..... MAY  
Harder Than Lead—Don Lewis ..... JUN  
The Magnifying Glass—Don Lewis ..... JUL  
The Holster Gun—Don Lewis ..... AUG  
The Sight Program—Don Lewis ..... SEP  
Thoughts on Shotgun Patterns —  
Don Lewis ..... OCT  
The Venerable 270 Winchester —  
Don Lewis ..... NOV  
You and Your Deer Rifle—Don Lewis ... DEC

## HISTORY

Darius—the Great Persian  
Conservationist—Robert M. Alison .... JAN  
Of White Men and Wildlife —  
Tom Eveland ..... FEB  
Pennsylvania's Ice Age —  
Eugene R. Slatick ..... MAR  
Audubon the Sportsman —  
Patrick V. McShea ..... APR  
Flash Floods!—Francis X. Sculley ..... JUN  
Nature's Explosive Violence! —  
Thad Bukowski ..... SEP

## HUMOR

Lot of Bull—Dave Lonich ..... FEB  
The Grass Grows Greener Under the  
Pheasant Crates—Jane Scott ..... MAR  
The Great Rugged Valley Brush,  
Bramble and Timber Charge —  
Edward Karasek ..... JUN

## HUNTING

Winter Grouse—K. D. Pritts .....	JAN
Barn Pigeons—The Wingshooter's Delight— R. W. Conrad .....	FEB
Dad's Way—Gary J. Williams .....	FEB
The Wrong Way to Hunt Bear— Kirk J. Zucal .....	FEB
A Buck Well Earned—Richard Tate .....	MAR
They Loved Pennsylvania— Charles M. Thomas, Jr. ....	MAR
Answers to Some Spring Gobbler Problems—Wayne Bailey .....	APR
Mr. Woodchuck, My Friend— George H. Block .....	APR
Small Game Wisdom—R. J. Savastio .....	APR
The Maturing of a Hunter— Chris Dolnack .....	APR
A Tempting Season— Shirley Grenoble .....	MAY
Those Incredible, Gullible Spring Gobblers—George L. Harting .....	MAY
Hunting with Friends—John D. Taylor .....	JUN
When It Comes to Long-Range Chucks— Nick Sisley .....	JUN
The Truth About Buck Huntin'— Richard G. Cole .....	AUG
The Dove Hunter's Dream— Jim Bashline .....	SEP
Jason's Hunt—D. A. Nevius .....	SEP
The Golden Age—Paul A. Matthews .....	SEP
Try the Funnel Effect For Deer— Robert E. Tallman, Jr. ....	OCT
The Grouse of Braddock Run— Paul L. Wright .....	OCT
Greene County Grouse Hunt— Andy Lucas .....	NOV
Pheasant Hunts Remembered— Nick Sisley .....	NOV
Last Season's Discovery—J. James Faux .....	NOV
Black Bear With A Muzzleloader— Denny Yale .....	NOV
My Cabbage Patch Buck— Denny Kolakowski .....	NOV
The Briar-Patch Buck—Phil Ruffner .....	DEC
A Cloud-Nine Record—Bob Banghart .....	DEC
At the Moosewa Hunting Club— George Spaid .....	DEC
Season Of The King—Joe Parry .....	DEC
The Way to Finish the Year— Douglas Meyers .....	DEC
December 14th—John D. Taylor .....	DEC

## MISCELLANEOUS

Questionnaire .....	JAN
Search—The New Technology in Pennsylvania—Sabastian Marinaro and Ken Boyles .....	MAY
The Indian Eye Test—Joel Littell .....	MAY

Beaks to Bills—Bob Cubbins .....	MAY
Ginseng in Pennsylvania— Kim D. Pritts .....	MAY
My Take-Along Fix-It Kit— Fred Bouwman .....	JUN
Cross-Firing—Bob Latimer .....	JUL
Call of the Outdoors—Jack Hubley .....	JUL
Hunting Pennsylvania Game With A Canon—George Sheldon .....	JUL
My Walking Stick—K. D. Pritts .....	SEP
The Questionnaire Results Are In— Bob Mitchell .....	OCT
A Tree Farm Legacy—Ken Olenderski .....	NOV

## NATURAL HISTORY

The 17-Year Cicada—Methusalah of the Insect World—Nick Kerlin .....	MAY
The Vultures of Gettysburg— Jeffrey B. Roth .....	JUL
Tattletale—Al Shimmel .....	JUL
In Praise of the Towhee— Carsten Ahrens .....	AUG

## PGC SERIES

A Seed Is Sown—Bob Mitchell .....	JUL
Branching Responsibilities— Bob Mitchell .....	AUG
State Game Lands—Investments in the Future—Bob Mitchell .....	SEPT
Managing For Wildlife—Bob Mitchell .....	OCT
A Taxing Solution—Bob Mitchell .....	NOV
Protecting Our Wildlife Habitat— Gregory J. Grabowicz .....	DEC

## RESEARCH

Treetop Browse—Steve Liscinsky .....	FEB
Rabies—A Threat to Man and Wildlife— Elizabeth Steward Lytle .....	MAR
Songsters of the Right-of-Way— W. C. Bramble, W. R. Byrnes and M. D. Schuler .....	APR

## THORNAPPLES

Thornapples— Chuck Fergus .....	ALL MONTHS
------------------------------------	------------

## TRAPPING

A Morning After Foxes In January— Bob Stortenbecker .....	JAN
A Look at Trapping—Joe Kosack .....	FEB
Sizing Up Traps—Joe Kosack .....	APR
Selecting Sets—Joe Kosack .....	JUN
Unmasking Muskrat Secrets— Joe Kosack .....	JUL
Coon Concentration—Joe Kosack .....	AUG
Shoreline Scouting—Joe Kosack .....	OCT





### **Voluntary Waterfowl Stamp No. 3**

Pennsylvania's 1985 waterfowl management stamp, created by Ned Smith, is the third such stamp offered by the Game Commission to provide waterfowl enthusiasts and stamp collectors an opportunity to help protect and manage waterfowl in the state. Funds derived from these sales are used for waterfowl habitat acquisition and development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. Available at the Game Commission's Harrisburg office, regional offices, the Pymatuning and Middle Creek Wildlife Management Areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints are available from art dealers and galleries nationwide. Collectors note: The agency's first stamp, issued in 1983, featuring a pair of wood ducks, will be available only until December 31, 1985, at which time remaining supplies will be destroyed.

# Surprise Your Favorite Sportsman with **GAME NEWS**

In U.S.  
1 Year \$6.00  
3 Years \$16.50

Canada and Foreign Countries  
1 Year \$7.00

GAME NEWS  
Pennsylvania Game  
Commission  
P.O. Box 1567  
Harrisburg, Pa. 17105-1567

